



Digitized by the Internet Archive
in 2011 with funding from
LYRASIS Members and Sloan Foundation

<http://www.archive.org/details/bethanycollegeb198488beth>

Bethany

College Bulletin 1984-1985



August 1984



Bethany College Bulletin 1984-1985

Vol. LXXVII No. 3
August 1984
(USPS 052-420)

Second class postage paid at Bethany,
West Virginia 26032. Published five
times a year, February, April, July,
August and October by Bethany
College, Bethany, West Virginia.

Notice of Nondiscrimination Policy

*Bethany College admits students of any
race, color, sex, religion, handicaps,
and national or ethnic origin to all of
the rights, privileges, programs and
activities generally accorded or made
available to students at the school.
Bethany does not discriminate on the
basis of race, color, sex, religion, and
national or ethnic origin in the
administration of its educational
policies, scholarship and loan
programs, athletic activities or other
school-administered programs.*

College Calendar 1984-1985

The Bethany calendar consists of two 15-week semesters and a two-week voluntary interim session in January. The fall semester is from September to before Christmas. The spring semester is from January to mid-May. Some courses are offered over the full semester while others are for the first or second half of a semester. This division provides flexibility for students to do off-campus study and internships.

The two weeks in January are an opportunity for students to elect for use in intensive study on campus or for off-campus work. Two four-week summer terms and an 11-week summer independent study period are offered.

First Semester

August
26-27 Sunday-Monday
Orientation and evaluation for new students
28 Tuesday
Registration
29 Wednesday
Classes begin for all students

September
4 Tuesday
Last day for re-adjustment of schedules without academic and financial penalty; last day to add a course
6 Thursday
Formal Convocation
11 Tuesday
Last day to determine credit/no credit
22 Saturday
Homecoming

October
6 Saturday
Parents' Day
16 Tuesday
Last day of classes for first-half of semester
16-17 Tuesday-Wednesday
Final exams for first-half semester courses
19 Friday
Mid-term grades due
29 Monday
Writing Qualification Test for Freshmen Seminars

November
10 Saturday
Board of Trustees meeting
12-16 Monday-Friday
Registration for second semester
16 Friday 4 p.m.
Thanksgiving vacation begins
26 Monday 8 a.m.
Thanksgiving vacation ends

December
11 Tuesday
Last day of first-semester classes
12 Wednesday
Reading Day
13-15 Thursday-Saturday
Final exam period
20 Thursday
Final grades due

January Term (January 7-18)

January
14-15 Monday-Tuesday
Senior Comprehensive Exams (Written)
16-19 Wednesday-Saturday
Senior Comprehensive Exams (Oral)

Second Semester

January
20 Sunday
Registration for all students and Diagnostic Writing Test for all transfers and readmissions
21 Monday
Classes begin for all students
25 Friday
Last day for re-adjustment of schedules without academic and financial penalty; last day to add a course
31 Thursday
Formal Convocation

February
1 Friday
Last day to determine credit/no credit
28 Thursday
Writing Qualification Test (Sophomores and Juniors)

March
7 Thursday
Founder's Day
6-7 Wednesday-Thursday
Final exams for first-half semester courses
8 Friday
Last day of classes for first-half semester courses
8 Friday 4 p.m.
Spring vacation begins
12 Tuesday
Mid-term grades due
18 Monday 8 a.m.
Spring vacation ends

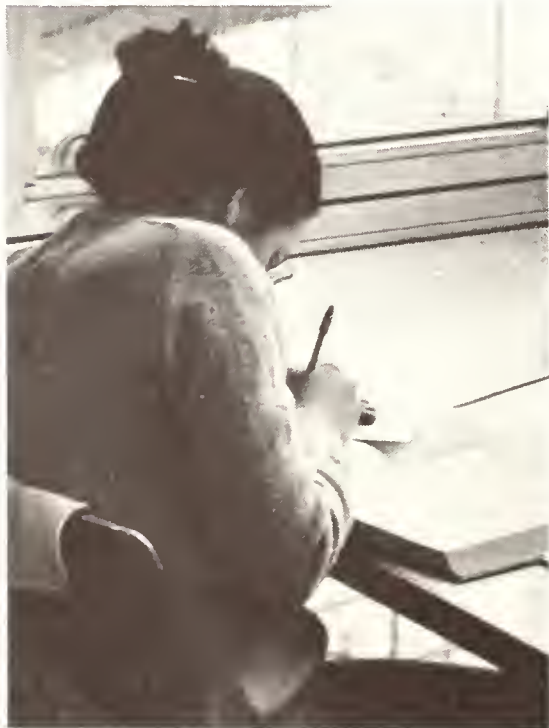
April
11 Thursday
Honors Day
15-19 Monday-Friday
Registration for first semester 1985-86
20 Saturday 8 a.m.
Reading period for seniors
22 Monday
Grades due for seniors taking comps
29-30 Monday-Tuesday
Senior Comprehensives (Written)

May
1-4 Wednesday-Saturday
Senior Comprehensives (Oral)
3 Friday
Gades due for seniors who took comps in January and last day of second-semester classes
4 Saturday
Alumni Day
6-8 Monday-Wednesday
Final exam period
9 Thursday 1 p.m.
Final Faculty meeting
10 Friday
Board of Trustees meeting
10 Friday 8 p.m.
Baccalaureate Service
11 Saturday 10 a.m.
Commencement
13 Monday
Final grades due

Table of Contents



Bethany Profile	5
Admission to the College	11
Expenses, Aid	15
Academic Programs	19
College, Student Life	29
Scholarships, Recognition	
Awards	33
Academic Procedures	39
Course Descriptions	43
The Directories	111
Index	119



Bethany Profile

Bethany College, now 144 years old, is a highly contemporary institution based in the tradition of the liberal arts.

The College offers a wide array of studies and awards bachelor of science or bachelor of arts degrees in the fields of Accounting, Biology, Chemistry, Communications, Computer Science, Economics and Business, Education, English, Fine and Applied Arts, French, German, Health Science, History, Interdisciplinary Studies, Mathematics, Philosophy, Physical Education, Physics, Politics and Public Policy, Psychology, Religious Studies, Science Applications, Spanish, Sociology and Social Work.

In addition, pre-professional education is available in chemistry, dentistry, engineering, law, medicine, public administration, theology, and veterinary medicine.

The College's program of liberal education prepares students for a lifetime of work and a life of significance. Bethany places particular emphasis upon the broad areas of communications, management, public policy and administration, and science and technology.



Bethany has excellent facilities to support the traditional offerings and its emphases, and integrates today's technology in its general education program. As one example, computing, a central feature in many academic disciplines, is offered as a field of concentration (major), and is an emphasis for the coming decade. The College's Center for Academic Computing is being enhanced this year with the addition of a visual arts center featuring up-to-date computer graphics equipment.

Bethany was founded March 2, 1840, by Alexander Campbell, educator, celebrated debater and Christian reformer who provided land and funds for the first building and served as first president.

Since its inception, Bethany has remained a four-year private liberal arts college affiliated with the Christian Church (Disciples of Christ). This religious body, of which Campbell was one of the principal founders, continues to support and encourage Bethany, though it exercises no sectarian control. Students of virtually every religious communion have been welcomed to the College.

Bethany is located in the northern panhandle of West Virginia in the foothills of the Allegheny Mountains. Pittsburgh is 48 miles to the northeast. Wheeling, W. Va., and Washington, Pa., are each a half-hour drive from the 1,600-acre campus.

Bethany students, approximately 800, represent nearly 30 states and nine foreign countries. Typically, one third is from the East coast and the New England states. Another third represents the Mid-Atlantic Region, while the remaining one-third is from other states and countries.



Goals

Bethany College is a private, four-year, church-related but autonomous, co-educational, residential, liberal arts college with a tradition of innovative and quality educational programs.

Bethany emphasizes critical reason and the religious dimensions of life, community experience and the importance of the individual, ethical responsibility and the satisfaction of

personal accomplishments, the integration of the total person and the value of a life of work and service to others.

The Bethany educational program is designed to help each Bethany student realize these goals:

- to discover how to acquire, evaluate and use knowledge
- to master the skills of communication
- to cooperate and collaborate with others in study, analysis and formulation of solutions to problems
- to understand contemporary issues and events
- to analyze personal values, to perceive and to deal sympathetically with the values of others, and to be open to the continued evaluation of both
- to make progress toward the selection of and the preparation for a vocation
- to integrate the various experiences of life and to see the relationship of the college experience to future development as a responsible citizen.





Accreditation, Memberships

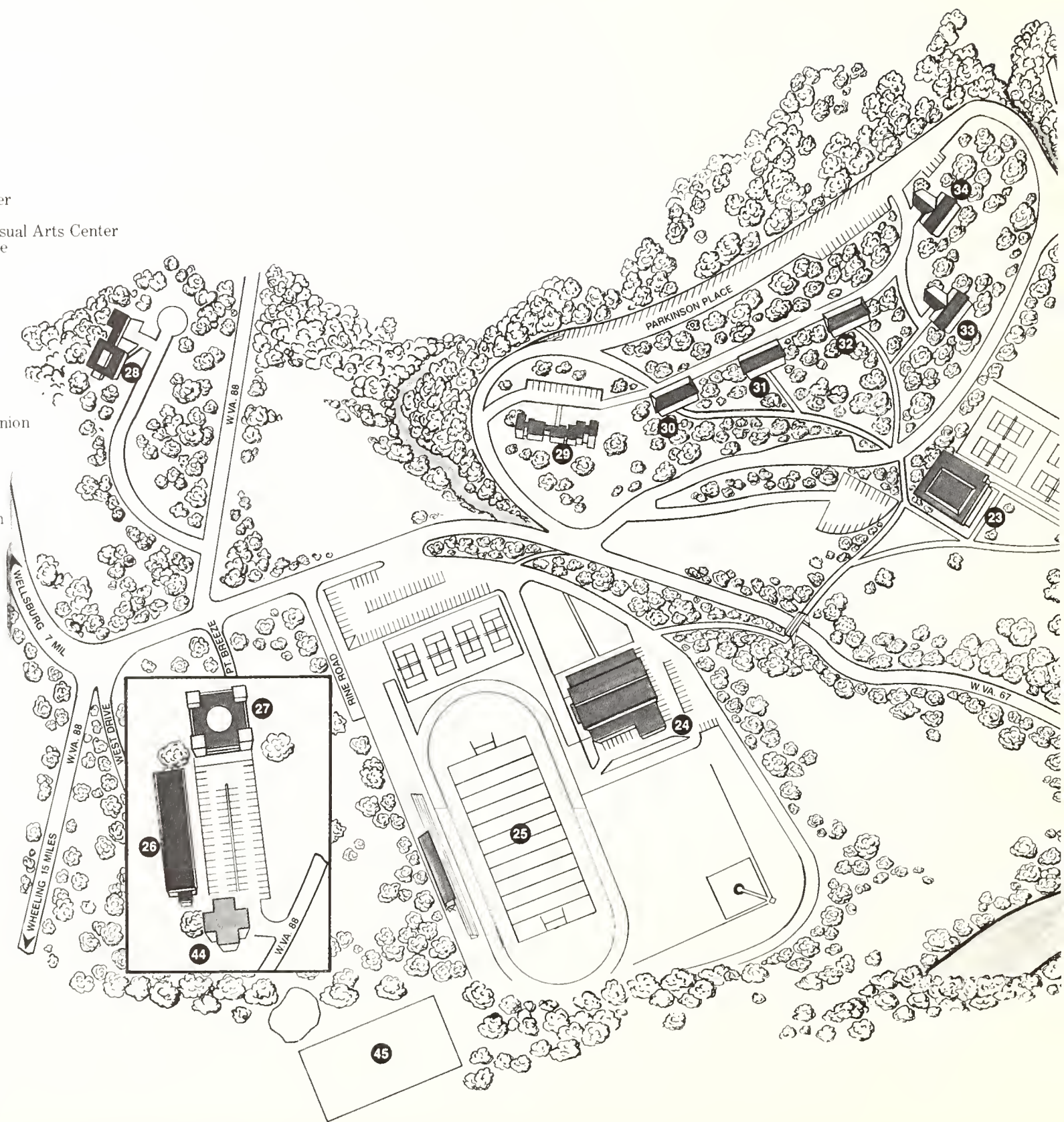
Bethany College is accredited by or holds memberships in:

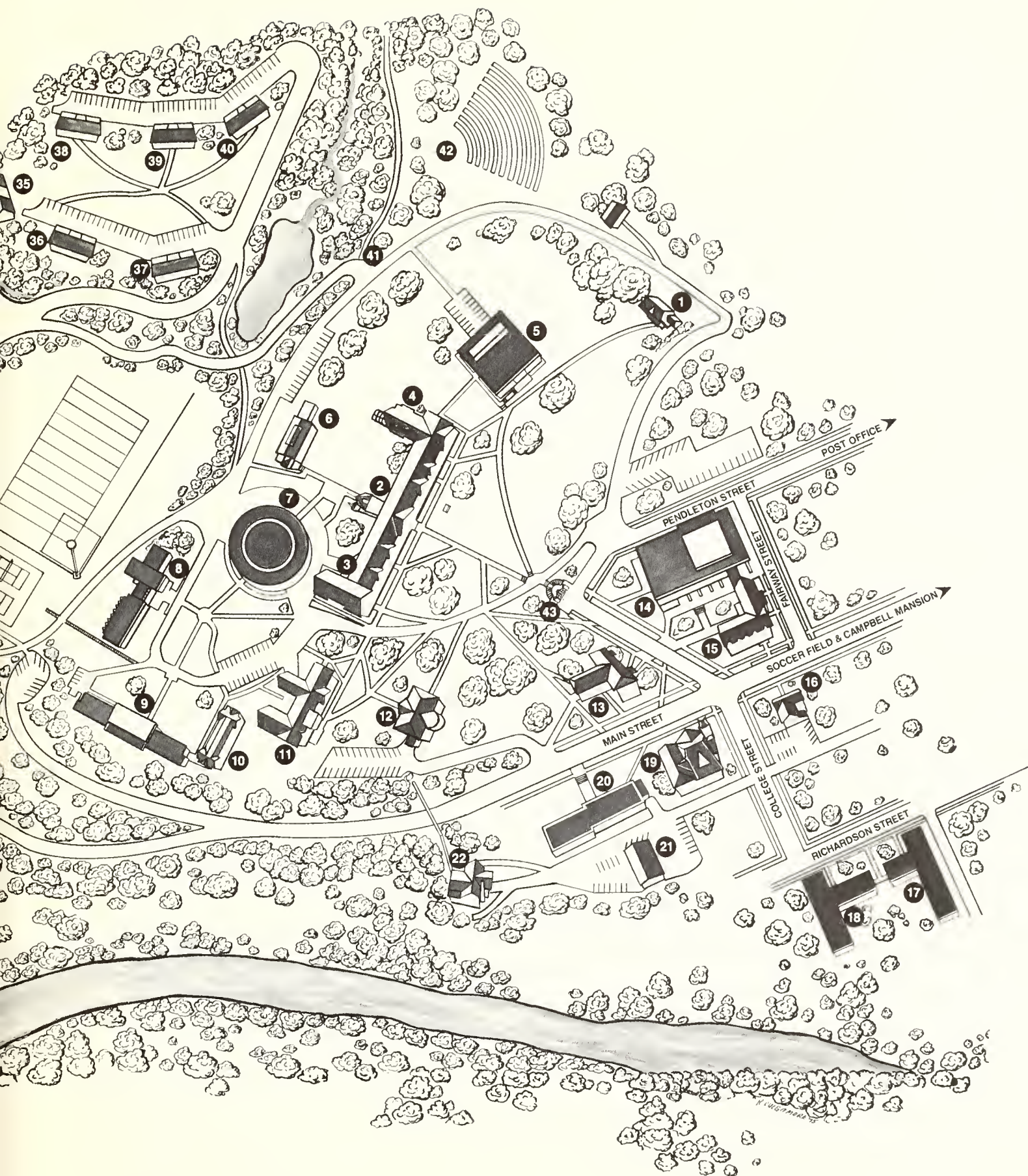
- North Central Association of Colleges and Secondary Schools
- Association of American Colleges
- American Council on Education
- American Association for Higher Education
- College Entrance Examination Board
- Council on Social Work Education
- American Association of Colleges for Teacher Education
- National Council for the Accreditation of Teacher Education
- Division of Higher Education of the Christian Church (Disciples of Christ)
- Women graduates are eligible for membership in the American Association of University Women



Bethany

1. Pendleton Heights
2. Old Main
3. Commencement Hall
4. Oglebay Hall
5. Steinman Fine Arts Center
Wailes Theater
6. Grace Phillips Johnson Visual Arts Center
7. Richardson Hall of Science
Weimer Lecture Hall
8. Phillips Memorial Library
9. Morlan Hall
10. Harlan Hall
11. Phillips Hall
Renner Too
Maxwell's
12. Cramblet Hall
13. Cochran Hall
14. Benedum Commons
15. Bethany House-Renner Union
Bookstore
Admission Office
16. Infirmary
17. McEachern Hall
18. McLean Hall
19. Bethany Memorial Church
20. Campbell Hall
21. Physical Plant
22. Heating Plant
23. Knight Natatorium
24. Alumni Field House
25. Rine Field
26. Gresham House
27. Leadership Center
28. Highland Hearth
29. Faculty Apartments
30. Clark House ($\Delta T \Delta$)
31. Hagerman House
32. McDiarmid House
33. Goodnight House
34. Woolery House
35. Zeta Tau Alpha
36. Independent House
37. Alpha Xi Delta
38. Phi Kappa Tau
39. Kappa Delta
40. Phi Mu
41. Weimer Nature Trail
42. Amphitheater
43. Oglebay Gates
44. Harder Hall
45. Athletic Field







Admission

Application

Bethany welcomes applications for admission from candidates who feel they would contribute to and benefit from a Bethany education. Admission is based on a careful review of all credentials presented by the candidate. The Committee on Admission accepts candidates it considers best qualified among those applying. In no case does the meeting of minimum standards assure admission. Acceptance is contingent upon a candidate's successful completion of secondary school.

The College seeks students who have prepared themselves for a liberal arts curriculum by taking at least 15 units of college-preparatory work. Although the College does not absolutely prescribe how these units should be distributed, it encourages a minimum of four years of English, three years of mathematics, three years of science, three years of social science and at least two years of a foreign language. For students who have developed individual curricula or are involved in experimental honors programs, the Committee on Admission makes special evaluation.



The application process includes furnishing a transcript of completed work, a personal file, two references, and either the College Entrance Examination Board Scholastic Aptitude Test (SAT) scores or the American College Testing Program (ACT) scores. Supporting documents that might be of help in the process of admission, that is poetry, plays, short stories, music, artwork, photography, and journalistic writings, may also be submitted.

Bethany's admission policy enables the Committee on Admission to act on completed applications as they are received. Applicants will be notified of the Committee's decision approximately three weeks after all credentials have been received. Early application is advised.

Transfers

Transfer students are welcome. Procedures for transferring to Bethany are similar to those for admission of freshmen. Any student in good standing at a fully accredited institution of higher education is eligible for acceptance. A majority of students accepted as transfers have above average grades and are seeking a campus life unlike that which they have experienced.

Grades of "C" or better are accepted along with course work in which credit (on a credit/no credit basis) or pass (in a pass/fail system) has been received. If requested, course work from other institutions will be reviewed by Bethany's registrar prior to making application.

Community/Junior College Graduates

Students who have received or will receive an Associate in Arts or Associate in Science Degree and find Bethany's curriculum suited to their educational goals are cordially encouraged to apply.

Holders of the A.A./A.S. Degree who are accepted receive at least two years (minimum 60 hours) credit, enter as juniors, and receive all the rights and privileges of upperclass students.

The College will make every effort to assist holders of Associate degrees to complete their baccalaureate programs within two years at Bethany. However, some fields of concentration may require more than 68 additional hours beyond the 60 referred to above, depending on the type of Associate's program the student has completed.



Application for Admission

A non-refundable \$15 fee is required at the time of formal application.

Application for Readmission

Students previously enrolled in Bethany College who wish to return for additional work must file an Application for Readmission with the Registrar's Office. A \$5 fee is required at the time such application is made.

Registration Deposit

Upon acceptance for admission or readmission, a \$100 registration deposit is required of all students. Once this deposit is paid it is not refunded until after graduation or until a Bethany student completes the following procedure:

Students not being graduated may have the deposit refunded after the last term of their attendance if written notice is given to the Business Office prior to the advance enrollment date for the next regular term. Such students may be readmitted by approval of the Dean of Students and the Business Manager.

Matriculation Fee

A \$20 fee, payable once by every new student, covers, in part, the cost of orientation and evaluation procedures for new students.

Early Admission

Some students complete their secondary school graduation requirements a year early and decide to pursue college admission after their junior year. For those who have demonstrated maturity and show evidence of a strong academic background, Bethany offers a program for early admission. For this type of admission, the usual admission procedures must be followed. A personal interview on campus as well as a discussion between the student's college counselor and a Bethany admission officer are required.

Advanced Placement

Students may receive advanced placement and/or credit from any department in the College through a testing program. This must be accomplished before the end of the first year at Bethany College. Those who wish to receive credit by examination should consult with the Office of Career and Professional Development and the appropriate department head.

Credit may be received for courses waived as a result of high scores on the College Entrance Examination Board Testing Program for Advanced Placement. The waiving of courses or granting of credit, however, are departmental matters and require consultation with the appropriate department head upon matriculation.

Visiting Bethany

Although not required, an on-campus interview with an admission officer is highly recommended. A campus visit will enable the student to develop some understanding of the College and its expectations. A comprehensive tour, observation of classes, and interaction with Bethany students and faculty are available upon request.

Prospective students are also invited to remain overnight as the guest of a Bethany student. Meals and overnight accommodations in college housing for prospective students are provided by the College. Lodging for parents is available on campus at Gresham House, as well as nearby lodges and motels. Transportation arrangements from the Greater Pittsburgh International Airport, as well as from the Pittsburgh rail and bus terminals, may be arranged through the Admission Office.

The Admission Office is open Monday through Friday from 9 a.m. to 4 p.m. and Saturday from 9 a.m. to 1 p.m. throughout the year. Appointments may be made by calling 304-829-7611 or by writing the Admission Office, Bethany College, Bethany, West Virginia 26032. Three days advance notice is requested to make proper arrangements.

Information on admission and registration fees, as well as details on expenses, aid and scholarships are on Pages 12-17 and 33-37.



Foreign Students

Bethany is pleased to receive applications from students of other countries. Approximately 10 countries are represented on campus each year.

Students from non-English-speaking countries are required to submit, along with an application for admission, a complete secondary school transcript, the results of either the American College Testing Program (ACT) or the College Entrance Examination Board Scholastic Aptitude Test (SAT) and the Test of English as a Foreign Language (TOEFL), and at least two letters of recommendation. Applicants for the Fall Semester must submit the above stated materials by February 1.

Foreign students are also requested to complete a Foreign Student's Financial Aid Application and Declaration. This form is to be returned with admission materials by the deadlines mentioned. Although Bethany is willing to review requests for financial assistance, funds are limited.



Expenses, Aid

Bethany College is a non-profit institution. Tuition, fees and other general charges paid by the student cover approximately two-thirds of the College's instructional and operational expenses. The remainder comes from income from endowment funds and from gifts and contributions. Bethany continues to keep costs as low as possible.

Comprehensive Charges

Comprehensive charges for the 1983-84 year at Bethany include the following:

Tuition and Fees	\$6,380
Room (Double Occupancy)	\$880
Board	\$1,450
Student Board of Governors	\$130
Bethany House-Benedum Commons	\$60

While a general charge is stated for Tuition and Fees, this fee may be divided into \$5,850 for tuition and \$530 for the following activities and services: athletics, health service, library, lectures, plays, concerts, publications, student activities, and laboratory services with the exception of music and art.

The Bethany House-Benedum Commons Fee is charged to all registered students and covers the operation and maintenance costs of the student union.

No reduction is made in student accounts for course changes made after the first two weeks of the semester. The College is required to collect a three per cent West Virginia sales tax on published charges for room and parking permits. Bethany reserves the right to change, without advance notice, the price for room, board and health insurance.

Financial Aid

Bethany believes that the funding of a student's education is primarily a family responsibility. However, financial assistance is available to those students whose resources will not fund a Bethany education and yet sincerely desire to attend. Outstanding students, regardless of demonstrated need, frequently receive scholarships and grants to attend the College. Several programs are available to such students. Inquiries are encouraged.

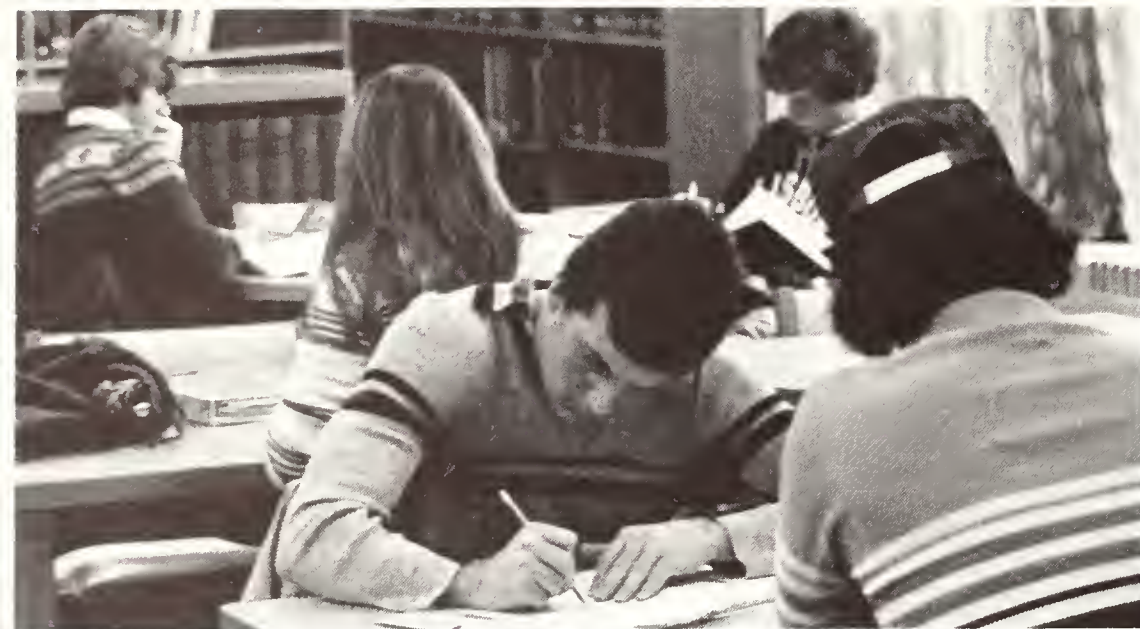
All need-based aid is awarded through careful evaluation of the Financial Aid Form (FAF), available from the student's guidance counselor. Designation of Bethany College as an institution to receive the processed information is required. All applicants for admission to Bethany are sent detailed information and instructions regarding the financial aid application and awarding processes, normally beginning in December.

Because of the large number of applications for financial aid, assignment of funds is made according to the date applications are processed, with April 1 established as the priority deadline for all new students. The earlier a student completes all admission materials and all financial aid materials, the faster the student will be awarded financial aid. However, the



FAF must not be completed until after January 1 as it also serves as an application for the Pell Grant Program.

A financial-aid applicant whose need for assistance has been verified by the College Scholarship Service will have his or her need met through a variety of financial aids, including scholarships, grants, loans, and College employment. The student has the option of accepting any or all of the aid offered. An interview with an officer of the College once the offer of assistance has been made can help to explain any problems. The Admission Office or the Financial Aid Office helps to arrange these interviews.



Fees for Overseas Programs

Oxford:
\$4,455 for one semester for tuition and fees, room and board and activity fees.

Madrid:
tuition and fees for one semester (\$3,620) includes round-trip air fare, tuition and examination fees and stipend to sponsor in Madrid.

Sorbonne:
tuition and fees for one semester (\$3,620) includes round-trip air fare, tuition and stipend to sponsor in Paris.

Tübingen:
tuition and fees for one semester (\$3,620) includes round-trip air fare, tuition and stipend to sponsor in Tübingen.

Other Special Fees

Chemistry 490	\$20
Education 470: off-campus student teaching (<i>per semester</i>)	\$3,420
<i>(includes tuition, fees and pre-school week board privileges in the Bethany dining hall)</i>	
English 284	\$15
Physical Education 340	\$30
Physical Education 341	\$30
Each academic hour when less than 13	\$244
Each academic hour in excess of 16	\$210
Auditing a course, per semester hour	\$210
<i>(a student is not charged if paying regular tuition and fees and the total program, including the audit, does not exceed 18 hours)</i>	
Comprehensive Examination	\$25
Graduation fee	\$35
Special guidance and advisory fee (<i>pre-college</i>)	\$10 to \$25
Special examinations in any department	\$15
<i>(there is a \$10 charge for each credit hour awarded by examination)</i>	
Key deposit for dormitories (<i>refunded if key is returned</i>)	\$5
Infirmery charge per day (<i>after the first three days each semester</i>)	\$5
Late registration (<i>per day</i>)	\$3
Automobile Registration	\$20

Fine and Applied Arts Fees

FAA 210	\$15
FAA 303	\$15
FAA 304	\$15
FAA 310	\$15
FAA 320	\$5
FAA 404	\$10
FAA 425	\$20

Fine and Applied Arts fees will also be required for independent study and studio courses where departmental materials are being used.

Private music lessons, two weekly \$145 per semester. Private music lesson, one weekly \$80 per semester.

Organ practice, one hour daily
\$35 per semester

Instrument Rental
\$10 per semester

Piano Practice, one hour daily
\$10 per semester

Voice Practice, one or two hours daily
\$10 per semester

Breakage Deposit

Chemistry and physics breakage deposits are covered by a \$10 breakage card which the student purchases each semester for every laboratory course in which the student is enrolled. In the event breakage exceeds \$10, an additional \$10 breakage card must be purchased. Unused portions are refunded at the end of each academic year.

Payment of Student Accounts

At registration, an invoice listing all charges due for the following semester is prepared for each student. Payments are due in accordance with the following schedule:

First Semester:

By August 15 payment due

Second Semester:

By January 15 payment due

Scholarships and loans may be applied as credit against August or January payment requirements.

Students will not be permitted to register if the payment requirements for each semester are not met. These requirements are in addition to the registration deposit. Checks or drafts should be made payable to Bethany College.

Bethany College bills for tuition, fees, room and board – twice yearly; other charges are billed as incurred. Twice yearly billings are payable in advance by August 15 and January 15 for the fall and spring semesters respectively.

Accounts past due – a monthly service charge of 1.5% on the first \$1,500 (18% per year) and 1% on any remaining balance (12% per year) will be charged as of the 25th of each month.



Students may not take final examinations, receive academic credit, obtain transcripts or graduate until satisfactory arrangements are made to cover financial obligations.

Monthly Payment Plans

Bethany has made arrangements with the Insured Tuition Payment Plan and EFI – Fund Management whereby student accounts may be paid on a monthly basis during the year. Arrangements to use this plan should be made prior to the registration period. Information may be obtained by writing to the Bethany College Business Office.

Student Drawing Account

The Business Office provides a limited banking service whereby students may deposit funds and draw on them as required. Students or their parents may make deposits to this recommended student drawing account which avoids the necessity of keeping on hand any substantial amount of money. All checks for this account must be made payable to the Bethany College Student Drawing Account.

Withdrawals and Refunds

After registration, there is no refund of room charges or fees. A student voluntarily withdrawing or withdrawing because of illness during the course of the semester will be charged 10 per cent of tuition charges for each week of attendance or part thereof. There is no refund of tuition after the tenth week of attendance. There is no refund in the event that a student is dismissed or asked to withdraw during the course of the semester. Board refund is prorated, based upon food costs only. Special fees are not refundable.

A student wishing to withdraw from Bethany must file written notice with the Dean of Students to qualify for refund of deposit and adjustment of other charges.



Academic Programs

Based in the liberal arts tradition, Bethany's academic program is designed to meet the educational needs of the individual while insuring breadth, depth and integration of knowledge. Bethany has designed its program of study to help students develop basic intellect, skills of learning, examined values, and good citizenship. Leadership preparation is a central theme of the College.

Through the traditional fields of concentration (majors) and a wide range of pre-professional studies, Bethany prepares students for further study, for employment, and for lives marked by special accomplishments.

A rich variety of learning opportunities is provided both in and out of the classroom and ranges from seminars, lecture courses, independent studies and laboratories to musical and dramatic productions and intercollegiate and intramural sports. Many off-campus programs are offered, including study abroad.

Learning opportunities at Bethany are set within a framework of common educational goals and programs which are organized to provide direction and guidance, as well as independence and choice.

Complementing Bethany's program of liberal education is the Professional Core Program, four distinctive and inter-related curricular options which supplement the student's field of concentration, broaden the career options and extend the academic experience.

Professional Core Programs are offered in:

- Management
- Public Affairs (Public Policy/ Administration)
- Communication (Marketing or Electronic Media)
- Science and Technology (Computing or Pre-Professional Science)

The Professional Core Program also is viewed as preparation for graduate or professional school in an area outside the student's regular field of concentration. All courses in a Professional Core must be taken for a letter grade.

Details on the Program are available in the Office of Career and Professional Development, as well as from individual faculty members. Students interested in pursuing this option should see their faculty advisor at an early point in their course planning. The four Professional Core Programs, including the courses in each, are outlined on page 43.

Bethany offers pre-professional study programs in:

- Engineering
- Medical and Health Professions
- Law
- Ministry

Students participating in one of the engineering programs spend three years in the liberal arts environment at Bethany and then attend Case-Western Reserve University, Columbia University, Georgia Institute of Technology or Washington University for an additional two years. The program permits the student to earn both a bachelor's degree from Bethany and a B.S. in engineering or applied science from the cooperating engineering school upon successful completion of the five-year sequence.

Students desiring to prepare for the study of medicine, dentistry or any of the health related fields find instruction and facilities at Bethany which satisfy the entrance requirements for the best professional schools.

Medical admission tests must be taken in the junior year and specific course planning is required, beginning with the first semester of the freshman year. Bethany also provides a degree program for certified allied health professionals who have completed accredited technical programs at other institutions.

No single curricular pattern is recommended as preparation for law school, but Bethany provides the key ingredients for entrance, such as breadth of knowledge and high levels of achievement in writing, critical thinking and logical reasoning.

Students planning to enter church vocations complete their preparation in seminaries and graduate schools of religion after undergraduate pre-seminary studies at Bethany.

Bethany provides thorough preparation for professions in the fields of chemistry, business administration, communications media, public administration, teaching of all levels, social work and many more.

Students are encouraged to contact individual academic departments, as well as the College's Office of Career and Professional Development, for academic and career planning.

Requirements for a Bethany Degree

The Bachelor of Arts and Bachelor of Science degrees are conferred by Bethany College.

The Bachelor of Arts degree is conferred upon the student who satisfactorily completes the following requirements:

- 128 semester hours with a minimum cumulative grade point average of 2.0
- a field of concentration
- the Perspectives program
- a senior project
- the senior comprehensive examination in the field of concentration
- demonstrated proficiency in expository writing
- the practicum requirement
- a freshman seminar
- a freshman interdisciplinary lecture course
- Religious Studies 100
- the residence requirement
- attendance at the commencement exercise

The degree of Bachelor of Science may be conferred upon a student who completes the Bachelor of Arts requirements and who chooses a field of concentration in biology, chemistry, computer science, mathematics, physics, psychology (B.S. plan) or science applications.



Field of Concentration

The field of concentration may be either departmental or faculty-student initiated.

A departmental field consists of a minimum of 24 credit hours (excluding the senior project) and a maximum of 48 hours within the department. No more than 24 hours from related disciplines may be required by a department.

The faculty-sponsored or student-initiated field, which may cut across departmental lines, may be developed. This interdisciplinary field of

concentration requires the approval of the Committee on Interdisciplinary Study. Such fields consist of a minimum of 24 hours (excluding the senior project) and a maximum of 72 hours. No more than 48 hours in any one department will be counted toward graduation.

These guidelines exclude any language requirements necessary for professional certification or for admission to a graduate program.

Perspectives Program

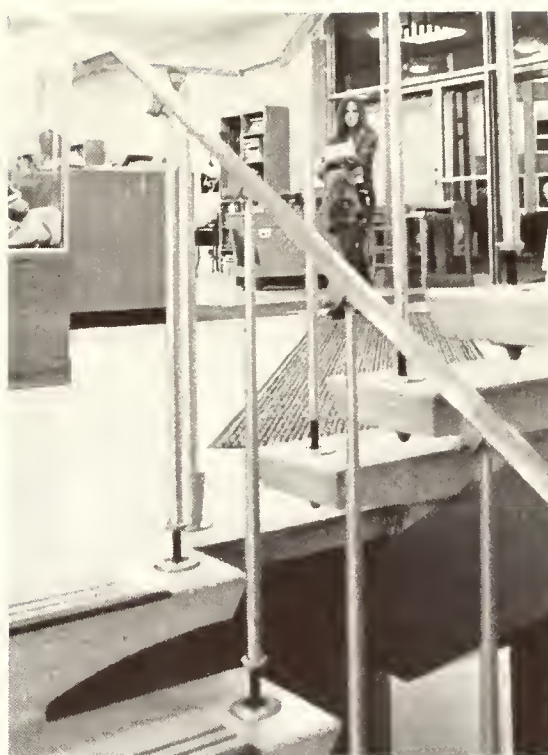
It is expected that all Bethany graduates develop eight perspectives on their world, each of which is, in appropriate ways, systematic, ethical, and integrative. The eight perspectives are historical, global, religious, aesthetic, scientific, quantitative, social, and personal.

To this end, every student must complete at least four hours chosen among the courses in each of the perspectives categories listed below, plus at least eight additional hours for a total of forty hours in the program. No more than eight hours can count toward fulfillment of the requirement in any one category.

The list of approved courses may change from year to year. Only courses taken in the year they appear on the approved list will count toward fulfillment of the requirement.

Historical Foundations: *to achieve a knowledgeable view of basic aspects of the origins and the modern background of Western civilization*

Communications 401; English 325, 326, 330, 341, 342, 370; Fine and Applied Arts 110, 111; French 313; 351, 352; German 351, 352; History 100, 201, 202, 301, 302; Philosophy 323, 324, 325; Physical Education 244; Spanish 351, 352, 353.



Global Awareness: *to gain an appreciation and understanding of the diversity of the world's cultures, not only Western but non-Western*

Communications 403; English 268; French 101, 102, 200, 301; German 101, 102, 200; History 426; Interdisciplinary Studies 201, 202, 204; Religious Studies 341, 342, 352; Spanish 101, 102, 200, 301.

Judaeo-Christian Tradition: *to understand the religious tradition of the West, particularly the Judaeo-Christian tradition, including the study of the Bible*

Religious Studies 100, 300.

Aesthetic Judgment: *to develop an ability to discriminate among various aesthetic forms and values and to gain a basic appreciation of the arts*

English 140, 150, 160, 261-262, 263-264, 270, 351; Fine and Applied Arts 101, 102, 103, 200, 201; Philosophy 358.

Experimental Science: *to learn how to explore the natural world through scientific investigation, including both first-hand laboratory (or field) experience and inquiry into the humanistic implications of the sciences*

Biology 100; Chemistry 100, 101, 102; Interdisciplinary Studies 210; Physics 201, 202; Psychology 100.

Quantitative Reasoning: *to achieve a knowledgeable view of analytical and quantitative ways of examining the world*

Computer Science 201; Mathematics 103, 201, 281; Philosophy 123; Psychology 103.

Social Institutions: *to grasp the basic organizing principles, structures, policies, and governing ideas of Western social (economic, political, etc.) institutions*

Communications 101, 304, 402; Economics 200; Physical Education 243, 280; Politics and Public Policy 225, 231, 300; Social Work 120, 230; Sociology 100, 205, 210, 351, 356.

Human Personality and Behavior: *to establish insight into the ways human beings understand themselves and their behavior and development*

Education 201, 202; Philosophy 100, 124, 252, 355; Physical Education 290; Psychology 186, 325, 326; Social Work 310; Sociology 220.

All courses taken to satisfy perspectives and field of concentration requirements must be taken on a graded basis. All students are required to pass Religious Studies 100. Generally, this course is taken in the freshman or sophomore year, and it may be used to fulfill part of the perspectives program requirements. Students should not enroll in Quantitative Reasoning courses until they have counseled with their advisors regarding the results of the freshman diagnostic test in quantitative skills.

Senior Comprehensive Examination

Capping the Bethany education is the Senior Comprehensive Examination. The examination is scheduled after all requirements for the field of concentration are met and the student has senior standing and at least a 2.0 cumulative average in the field. Comprehensive examinations assure the College of qualitative accomplishment and lead the student to a sense of self-confidence and achievement.

The examination is both written and oral and is offered in January and in May. The oral part of the examination is scheduled by the registrar as soon as practicable after the written, but in no case more than two weeks later. To register for taking the Senior Comprehensive Examination, a student must contact the Office of the Registrar at least two months prior to the first day of the written examination.

Students who have completed all requirements in their field may take the examination in January with the consent of their advisor(s). Students failing the examination in January may take it again in May or at any time it is regularly given within the following 12 months. If the student fails the second time, the student may petition the faculty for a re-examination during the following year. No student may take the examination more than three times.

In some departments, sections of the Graduate Record Examination (GRE) may also be considered part of or prerequisite to the Senior Comprehensive.

Students who do unusually well on the Senior Comprehensive Examination are listed at graduation as having "passed with distinction."



Senior Project

Each student must produce a project which meets the standards of his or her field of concentration.

The project is received and evaluated during the final semester of the senior year. Two to eight hours of credit are given after the final evaluation and approval of the project. Scheduling of the project is at the discretion of the department or the student's advisory committee.

The project is evaluated by at least one person in the field of concentration other than the student's advisor(s). The final evaluation is made in consultation with the student and the project is made available to the College community.

Projects range from extensive research papers to creating graphics on a computer, writing and producing a radio series, designing a brochure, writing and presenting a play.



Writing Proficiency Requirement

All students must achieve and maintain an above-average level of proficiency in expository writing. They may do this by either taking the annual Writing Qualification Test or by satisfactory completion of selected writing courses offered by the English Department. Special arrangements are made for students who transfer from other colleges and transfer students should consult the Department of English immediately upon enrolling at Bethany.

Details on the Writing Qualification Test, including when it is given, as well as information on writing courses from which the student may elect, are included under the Writing Proficiency Program section in the English Department, Page 68.

Practicum Program

Practicums are practical experiences encompassing values Bethany believes to be essential to a complete education. These experiences make a student's academic studies more relevant to the everyday world.

Each student must successfully complete four practicums. They are:

- an example of responsible citizenship
- an awareness and involvement in health, physical education and recreation
- an intercultural living experience
- a vocationally oriented placement.

Students, with the assistance of the advisor and the director of practicums, develop proposals which must have approval of a faculty member and meet the guidelines established for each practicum. Each student completes an evaluation of the experience after each practicum.

Seniors must fulfill all proposals by February 10 and all evaluations by April 15 of the graduation year.

Further information is available from the director of practicums or the registrar.

Residence Requirement

Four years are usually required to satisfy the course and residence requirements for the baccalaureate degree. Students of superior ability may complete the requirements in less time. As a rule, the senior year or the last two semesters are to be spent in residence at the College. However, students who have had one full year of residence previous to their senior year, and who apply for and are approved by the Policy Appeals Board for off-campus study programs during their senior year, may sometimes be permitted to count that work toward graduation requirements.

Freshman Program

Freshman Seminar: All entering freshmen enroll in a freshman seminar during the fall semester of the freshman year. The professor directing the seminar also serves as the student's academic advisor.

Freshman Interdisciplinary Course: Freshmen take the freshman interdisciplinary course in the spring semester of the freshman year.

Descriptions of the courses offered in the freshman program are on Pages 44-45.

Academic Advisor

The student-advisor relationship is the cornerstone of a Bethany education. The student and his or her advisor work together to develop appropriate classroom and experience-based programs. Freshmen see their advisors two times a week during the first semester's freshman seminars and also meet privately with advisors.

Usually during the sophomore year, students elect a major field of concentration, thus transferring to an advisor associated with their major area of interest.

Advisors are designated for freshmen, for specific fields of concentration, for each Professional Core Program, for career interests and for specific services such as campus employment, counseling, graduate programs, testing, scholarships, vocational information and guidance, and others.

A listing of advisors – for freshmen, for fields of concentration, career interests, the Professional Core Program and special interests – is on Page 117.

Career and Professional Development

Bethany's Office of Career and Professional Development assists students and alumni in developing life skills, planning careers and obtaining both temporary and permanent jobs. Personal and career counseling are provided and workshops are presented on such topics as resume writing, interviewing, job hunting, values, skills identification, conflict resolution and time management. The Office coordinates and schedules campus employment and corporate recruiting. It also maintains a Career Resource Center consisting of career planning literature, job announcements, a volunteer contact network of alumni and friends of the College, material on internships and graduate and professional school information. Free credential service is available to all seniors and alumni who register with the Office.

Work Internships

A student may spend a semester combining practical professional experience with formal off-campus study. A student wishing to do this must arrange a full-time job in his or her chosen area and arrange independent study integrating this work experience with formal theoretical study.

A written proposal, signed by the department in which the student intends to earn academic credit, must



be submitted to the Curriculum Review Board of the College. This proposal must be signed by the faculty member charged with supervising and evaluating the project. The proposal must include a description of the student's goals in undertaking the program, a description of the experience that includes a summary of his or her responsibilities and the name of his or her supervisor, a description of the formal independent study course work, an explanation of the way in which the program relates the work experience and the formal independent study course work and a description of the methods to be used in supervising and evaluating the entire project.

Eight credit hours will be awarded for satisfactory completion of the project. No additional academic work may be taken during the semester of the project.

Washington Semester

Arrangements have been made for one or two advanced students in history, politics and public policy, economics or sociology to pursue studies in these fields under the direction of the American University in Washington, D.C. A student participating in this plan takes six to nine hours in regular academic work and six to nine hours in the study of government supervised by Bethany College and American University. Participants in the program must be recommended by the program advisor and have the approval of the Dean of the Faculty.

State Government Study

The Departments of History and Politics and Public Policy administer a program in conjunction with the West Virginia University Foundation in which an outstanding junior or senior is selected each year to spend one week in Charleston, W. Va., studying three branches of state government. Two hours of credit may be granted for this program.

Academic Common Market

Bethany is a member of the Academic Common Market, an interstate agreement among southern states for sharing academic programs. This agreement allows Bethany students, who qualify for admission, to apply for enrollment in 80 graduate degree programs in other common market states on an in-state tuition basis. This program is sponsored by the Southern Regional Education Board. Further information concerning the Academic Common Market may be obtained by contacting Bethany's Office of Career and Professional Development.



External Programs

Bethany College develops special programs for older adults through intensive, short-term residential and off-campus seminars, institutes, courses and workshops. These programs are generally aimed at business, industrial, educational, professional and church organizations. Emphasis is given to the fields of communications, management study, computing, public policy and religion.

These programs are conducted through The Bethany College Leadership Center, Bethany's award-winning conference center which includes the Millsop Conference Center building, Gresham House lodge and Harder Hall educational and dining facility. The Center is another link between the College and the world at large and is used by business corporations, government agencies and non-profit organizations for their professional training and educational needs. The Center also provides opportunities for students, such as internships, practicums and employment.

Each summer, the Bethany campus and facilities are the site for camps for youth. These camps range from computers to a variety of sporting activities and include church groups and bands. Retreats and performing arts workshops are among other well-attended programs planned by or held at the College.

Overseas Study Offerings

Under approved supervision and direction, qualified students may secure credit for formal work completed in foreign colleges and universities. To be eligible for study abroad, the student should normally be a junior and must have the approval of the External Programs Committee.

Oxford Semester

Under this program, approximately 20 students spend the fall semester in Oxford, England, studying British literature, history, and culture with a Bethany professor. Participants are matriculated as full-time students at Bethany College, but live and study in Britain.

Paris Sorbonne Program

Under special arrangement with the Sorbonne, qualified Bethany students may enroll for a semester or full year in its Cours de Langue et de Civilisation Française. Bethany's official

representative in Paris serves as counselor to Bethany students during their stay at the Sorbonne.

Madrid Study Program

Under special arrangement with the University of Madrid, qualified Bethany students may enroll for a semester or full year at the university.

Tübingen Study Program

Qualified students are given an opportunity to do intensive study in the German language and to work out an individualized program at the University of Tübingen, Germany. An adjunct member of the Bethany faculty serves as mentor.

Other Overseas Programs

There are additional overseas programs in which Bethany students have participated. These include:

- 1) Beaver College Semester at the City College of London (England)
- 2) University of Glasgow, Scotland
- 3) American University, Beirut, Lebanon

The coordinator of international education programs provides interested students with information concerning programs which have been examined and approved.



Educational Resources

Substantial resources are invested in the education of Bethany students. The gross assets of the College, on June 30, 1983, totaled \$38,654,834. Facilities and equipment at book value were \$20,860,638, with a replacement value of approximately \$36,330,000. The market value of all endowment funds was \$19,864,118.

More than 30 academic, administrative and residential buildings are located on the 1,600-acre campus.

The principal structures are:

Old Main (1858) is the centerpiece of Bethany's academic buildings. Its tower dominates the campus and is the chief architectural feature noted as one approaches the College. Old Main is listed in the "National Register of Historic Places." The building is one of the earliest examples of collegiate Gothic architecture in the United States. Old Main restoration work has been under way since 1977 with approximately \$2.5 million invested in the project which continues this year.

Commencement Hall (1872) provides the setting for convocations, concerts, lectures, dramatic presentations and other gatherings. During 1983-1984, the Hall is being restored to its original state.

Grace Phillips Johnson Visual Arts Center (1984) offers facilities for computer graphics, television, painting, sculpture and design. A ceramics studio is adjacent to the Center. The building was formerly Irvin Gymnasium (1919). Complete renovation accomplished during 1983-1984 makes this an outstanding facility for instruction in the visual arts.

Richardson Hall of Science (1964) provides contemporary facilities for the chemistry, physics and mathematics departments and houses the Academic Computer Center. It is named for Robert Richardson, Bethany's first science professor.

David and Irene Steinman Fine Arts Center (1969) provides excellent facilities for music and theatre. A fully-equipped theatre occupies the central portion of the building. Teaching studios, studio-classrooms, a general rehearsal room for the larger choral and instrument groups, and individual practice rooms support instruction in music.

Cramblet Hall (1905) was constructed through a gift from Andrew Carnegie. Originally the library, it was remodeled in 1961 to house Bethany's administrative offices. It is named in honor of two presidents of the College, Thomas E. Cramblet and his son, Wilbur.

Cochran Hall (1910) was built as a men's residence by Mark M. Cochran of the class of 1875. The interior of the building was completely remodeled during 1974-75 to serve as a faculty office and student conference center. Today it houses several academic departments and administrative offices of the College.

Oglebay Hall (1912) a gift of Earl W. Oglebay of the class of 1869, accommodates the laboratories and classrooms for the biology and psychology departments.

Pendleton Heights (1841) was built during the College's first year by W. K. Pendleton, a member of the first faculty and second president of the College. Today it serves as home for Bethany's president. Pendleton Heights is listed in the "National Register of Historic Places."

Renner Union-Bethany House (1948) is the student union. Here are found the campus radio station, the College bookstore, a student photographic darkroom, music listening rooms, a spacious lounge, and the Admission Office. The alumni joined in 1969 with the R. R. Renner family of Cleveland, Ohio, to remodel this facility.



Benedum Commons (1969) is the modern, air-conditioned dining facility for all Bethany students. In addition to the main dining room, the building houses a snack bar, lounge facilities and several small dining rooms for special student and faculty events.

John J. Knight Natatorium (1967) contains a six-lane, 25-yard, heated pool which is used in the physical education program and for intercollegiate competition. It is named for John J. Knight, long-time director of athletics. Four tennis courts are located next to the natatorium.

Alumni Field House (1948) provides physical education facilities for men and women. It is also used for concerts. Adjacent to the field house are football, soccer and baseball fields, tennis courts, and a quarter-mile track.

The T. W. Phillips Memorial Library (1959) contains nearly 155,000 volumes of books and bound periodicals with additional collections of microforms, pamphlet files, selected government documents and circulating art prints. Periodicals and newspapers from across the nation and throughout the world arrive daily. The Library has membership in the Pittsburgh Regional Library Center and the OCLC nationwide computerized network. The Library's Campbell Room contains books, periodicals, letters, paintings, photographs and museum pieces related to Bethany's Founder and first President, Alexander Campbell. Also located in the Library is the Media Center which provides instructional media materials, laboratories and production facilities.

The Center for Academic Computing offers a wide variety of services from computer-assisted instruction and word processing to consulting services and classroom computer demonstrations. The Center's PRIME 550 computer is accessible from interactive workstations, including printing terminals and graphics terminal with copier. The facility supports text editing, system software packages, an educational software library and several programming languages. A separate microcomputing facility offers microcomputing training with application to graphics and automated instrumentation data collection.

The Leadership Center

Millsop Building (1972) is the world's first solarized satellite receiving center and houses offices, seminar rooms, exhibition areas, and a 123-seat circular conference room for continuing education activities. The center offers a regular series of conferences, seminars, and workshops for education, business, and professional groups. It is a memorial to Thomas E. Millsop, former president and chairman of the National Steel Corporation.

Gresham House (1972) is a guest facility which provides 40 rooms for overnight accommodations for visitors to the College. It is named for Dr. Perry E. Gresham, Bethany's twelfth president, and his wife, Aleece.

Harder Hall (1981) is an educational laboratory/dining facility. It adjoins Gresham House, the forty room overnight guest facility. It honors Delmar C. Harder, a pioneer in automation in the American auto industry.



College, Student Life

At Bethany, education is a total experience of living and learning. The College community offers a great variety of activities and students are encouraged to participate in those which best compliment their educational experience. Many opportunities for leadership experience are provided.

Bethany encourages the mature and responsible citizenship of its students. The College believes this citizenship is realized through measured personal freedom of each individual, as well as the community building efforts of students, faculty and administrators. College officials intervene when the rights and privileges of some are threatened by the actions of others.

Student Government

The Student Board of Governors, with representatives from all residence groups, manages a substantial budget and appropriates funds for a wide variety of student activities. Students are appointed to many faculty committees, including those concerned with curricula, athletics, religious life, international education, cultural and speakers' programs and others.

Residence halls help to shape the social life of the campus. Fraternities, sororities and house associations accommodate all upperclassmen in small, self-governed units. Students are responsible for their conduct; for academic, cultural and social programming; and for care of the facilities. Freshmen, soon after their arrival, organize and send representatives to student government.

Residence Life

Most Bethany residences are small living units accommodating 32 or 48 students and containing social and recreational facilities.

Freshmen live in somewhat larger residence halls but are granted many of the same freedoms and responsibilities of the upperclassmen. Head residents and student resident assistants give leadership and counsel to freshmen.

Phillips Hall, one of two freshmen women residences, is the most gracious residence hall on campus. Built in 1890, it was remodeled and restored in the late 1970s. The ground floor now houses a large, multi-purpose recreation room, Renner Too, and Maxwell's Coffee House and kitchen facilities.



Social, Fraternal Life

Fraternities, sororities and independent house associations constitute the primary social groups of upperclass men and women on campus. The six fraternities and four sororities are nationally affiliated and their members constitute approximately 65 percent of the student body. Representatives from each act as the coordinating agencies in fraternal affairs and activities.

Fraternities represented are Alpha Sigma Phi, Beta Theta Pi, Delta Tau Delta, Kappa Alpha, Phi Kappa Tau and Sigma Nu. Sororities are Alpha Xi Delta, Kappa Delta, Phi Mu and Zeta Tau Alpha.

The student-run College Union Program Board is responsible for much programming which includes a wide range of musical groups, from contemporary performers to opera and dance, and other cultural activities ranging from speakers to art and photographic exhibits.

In the past few years, Bethany programs centering on international business, American business and American politics have offered an array of distinguished speakers and visitors to the campus to meet with students as well as faculty. Leading these programs have been a former President of the United States, three United States Senators, two governors, a former Governor, an Ambassador, five corporate chief executive officers and a dozen or more leaders in the fields of public affairs, business and the arts and sciences. Each presentation has included social as well as seminar and workshop contact for students.

Other activities on campus which are well supported by student participation include theatre, various musical groups, intercollegiate and intramural sports and a score or more student-run clubs. The campus media – a weekly newspaper, yearbook, a magazine, a literary magazine, an FM radio station and a cable TV station – command much student interest and participation.



Religious Life

Many religious backgrounds are represented in the student body and faculty. While participation in religious activities is voluntary, there are many opportunities for religious participation on campus.

Many students find in Bethany Memorial Church an opportunity for expression of their religious faith. The minister of this church, who is also the College chaplain, is available to students for counseling and advice on personal and religious matters.

The Bishop of Wheeling-Charleston Diocese of the Roman Catholic Church provides a chaplain and chapel for Catholic students. He is available daily for counseling, in addition to the celebration of Mass each Sunday and on Holy days.

The Jewish fellowship meets for worship and study. Jewish congregations in Steubenville and Wheeling sponsor the fellowship and entertain Jewish students for the high holidays.

Student Regulations

A complete description of the regulations pertaining to housing, telephones, dining rooms, health services, motor vehicles, use of alcoholic beverages and drugs, eligibility requirements, and other areas of student life is contained in the *Student Handbook*. However, applicants for admission should know the following in advance:

- 1) The College expects and enforces lawful behavior in all matters. Particular emphasis is placed upon respect for the rights of others and upon other principles of good citizenship.
- 2) With the exception of commuters (i.e. married students or students living with parents) all students are required to live in College residence halls or fraternity or sorority houses unless excused by the Dean of Students.
- 3) All students, except commuters, are required to board in the College dining hall unless excused by the Dean of Students. No refunds are granted for meals missed.
- 4) Freshmen are not permitted to bring automobiles to Bethany unless the request is approved by the Dean of Students and the vehicle is properly registered.
- 5) Violations of regulations which are not adequately dealt with by the self-governing housing unit are judged or otherwise disposed of by the Dean of Students.



Student Health Services

All students entering Bethany for the first time are required to submit a completed physical examination form before registration. The College health service is maintained by student fees, and all students are entitled to nursing service and specified access to a physician. A minimum charge for prescription medicines, ointments or injections may be added to the student's account.

The Bethany infirmary is on 24-hour call for illnesses and injuries which occur during the academic year. Service is not available at the infirmary during vacations and recess periods. Students who suffer serious illnesses and accidents are usually treated at the Wheeling Hospital, located 15 miles from the town of Bethany. Ambulance service for emergencies is available.

The College physicians have regular office hours during the week for free consultation. In case of an emergency operation, when the parents cannot be reached, the Dean of Students, upon the recommendation of the College physician, assumes the responsibility of giving permission for treatment.

Bethany provides medical, surgical, and hospitalization insurance. All students are automatically included in the coverage from September 1 to August 31 and are charged accordingly unless the appropriate waiver is forwarded to the Business Office. Expenses for outside consultation and treatment are the responsibility of the student in all cases when not covered by insurance.

Intercollegiate Athletics, Intramurals, Recreation

Bethany College is a member of Division III of the National Collegiate Athletic Association. Women's basketball and all men's teams participate in the Presidents' Athletic Conference. Members of the Conference, in addition to Bethany, are Carnegie-Mellon, Grove City, Thiel, Washington & Jefferson, John Carroll and Hiram. Women's volleyball, field hockey, tennis, and softball teams will remain in the Pennwood West Conference until the fall of 1985. Members of this conference are Bethany, Carnegie-Mellon, Chatham, Carlow, Seton Hill, St. Francis, and Washington & Jefferson.

Recreation is provided for the entire student body through an extensive intramural and open recreation program. There is ample opportunity for students wishing to pursue everything from archery to rafting, backpacking to jogging and team sports.

Facilities on campus and nearby offer opportunities for football, racketball, softball, baseball, basketball, volleyball, soccer, tennis, swimming, golf, cross country, track, table tennis, bowling, wrestling, badminton, horseback riding, body mechanics, dancing, gymnastics, aerobics, skiing, jogging, camping, hiking and nature study.



Scholarships, Recognition Awards

Bethany recognizes promise and intellectual attainment by awarding a large number of scholarships. These awards vary in value and are available to a limited number of entering students. Most scholarships are awarded to freshmen on a four-year basis but are continued from year to year, only if the recipient has met the following conditions:

- A satisfactory scholarship index
- Satisfactory conduct as a student
- Worthwhile contributions to the College program
- Constructive citizenship in the College community
- Payment of student accounts as scheduled

Each fall, Bethany holds the **Competitive Scholarship Opportunity**, a program which offers tuition grants, regardless of financial need, in areas of social sciences, physical and life sciences and the humanities. These scholarships are awarded on the basis of performance on a competitive examination, secondary school record, standardized test scores and personal qualities.

Each spring, Bethany offers its **Kalon Leaders Program** in which participants vie for four-year tuition grants, also regardless of financial need. Selection is based upon past leadership achievements, secondary school record, a required essay and references. Candidates are interviewed by Bethany faculty and the results of these interviews are used in the selection process.

Bethany offers a wide range of scholarships, designated and external trust scholarships as well as sustained awards and loan funds.

These awards, most named for distinguished alumni and faculty members and friends of the College, are awarded to worthy and eligible students. Some are designated for specific fields and interests.

Awards are made by the President and by the Scholarship and Financial Aid Committee in accordance with the requirements of a particular endowed fund.

A complete listing of all scholarships is available from Bethany's Office of Development, the Office of the Dean of the Faculty, and the Office of the Dean of Students.

Achievement Recognition

Bethany encourages achievement in scholarship and leadership in student affairs by public recognition at Commencement, Honors Day and on other suitable occasions.

Graduation Honors

Students who have done academic work of unusual merit are graduated with honors: *Summa Cum Laude* (3.85), *Magna Cum Laude* (3.65), or *Cum Laude* (3.35). The awarding of honors is determined upon the basis of total quality points earned, standing in the Senior Comprehensive Examination, and the recommendation of the student's advisor.

Senior Fellowships

Certain members of the junior class may be designated as senior fellows for the following year. The selection is made from students who have demonstrated unusual excellence in their field of concentration and who, by character and ability, can do special work in a department or area as an assistant in instruction or research.

Usually no more than 12 full-year senior fellowships and one senior fellowship *at-large* (or the equivalents) are awarded in any one year. Usually no more than one full-year appointment (or the equivalent) will be made in any one department or area. Although the title of *senior-fellow-at-large* is provided primarily for capable students involved in interdisciplinary programs, students in other fields of concentration may be nominated for this category.

The selection of senior fellows is made by the Honors Committee from nominations usually presented by department heads.

Dean's List

At the end of each semester, students who have rated high academically (grade point average of 3.65 or better) and have completed at least 12 graded hours during the semester are designated as "Students Distinguished in Scholarship." Often called the Dean's List, this distinction is determined by the Honors Committee.

Honor Societies

A number of honor societies have been established at Bethany through the years to recognize academic achievement and campus leadership.

Gamma Sigma Kappa is a scholastic society founded at Bethany in 1932. Students who have achieved a cumulative scholarship index of at least 3.70 (over at least four consecutive semesters and provided that in no semester their scholastic index falls below a 3.00 and provided the student has completed at least 12 graded hours in each of the semesters) may, upon recommendation of the Honors Committee, be considered for membership. Usually, however, not more than 10 percent of any class will be recommended.

Bethany Kalon is a junior and senior society established in 1948 to give recognition to students of high character who have demonstrated competent and unselfish leadership in student activities and have been constructive citizens of the College community. Selection is made by the members of the society with the advice and approval of the Honors Committee.

Alpha Phi Chapter of Beta Beta Beta is for students of the biological sciences. Its purpose is to stimulate sound scholarship, to promote the dissemination of scientific truth, and to encourage investigation into the life sciences.

Alpha Beta Gamma is an honorary organization in education dedicated to recognizing and fostering professional concern, involvement, and experience in education.



Gamma Upsilon Chapter of Lambda Iota Tau. Lambda Iota Tau is an international honor society for the encouragement and reward of scholastic excellence in the study of literature. Membership is limited to juniors and seniors who have a cumulative scholarship index of 3.0, who have completed a minimum of 12 semester hours of literature courses with at least a 3.0 grade-point average in them and in all prerequisite courses, and who have presented a scholarly, critical, or creative paper which has been accepted by the chapter. The chapter presents an annual award for the best senior project in literature. Lambda Iota Tau is a member of the Association of College Honor Societies.

Alpha Chapter of Omicron Delta Epsilon, an international honor society in economics, was established in 1960 to recognize excellence in the study of economics. Membership is limited to students who have completed a minimum of 16 semester hours of economics, including either Economics 301 or 302, and who have achieved both a departmental and overall grade-point average of 3.25 or better.

Beta Gamma Chapter of Alpha Psi Omega. Alpha Psi Omega is a national recognition society in dramatics. Students qualify by faithful work in playing major and minor roles or working with technical or business aspects of theatre.

Mu Epsilon Chapter of Phi Alpha Theta was established at Bethany in 1967 to recognize excellence in the study of history. Its membership is limited to those students who have completed at least 12 hours of history with a grade-point average of 3.1 or better and with at least a 3.0 grade-point average in two-thirds of all other studies. Members must also rank in the upper 35 per cent of their class.

Bethany Chapter of the Society for Collegiate Journalists, a national recognition society in journalism, is designed to stimulate interest in journalism, foster the mutual welfare of student publications, and reward journalists for their efforts, service, and accomplishments.

Kappa Xi Chapter of Sigma Delta Pi is an honor society for those who attain excellence in the study of the Spanish language and the literature and culture of the Spanish peoples. Students who are at least second semester sophomores and have a high scholastic index and who have completed at least one advanced course in Spanish literature are eligible for membership.

Epsilon Chi Chapter of Kappa Pi is for students of graphic arts. Its purpose is to uphold the highest ideals of a liberal education, to provide a means whereby students with artistic commitment meet for the purpose of informal study and

entertainment, to raise the standards of productive artistic work, and to furnish the highest reward for conscientious effort in furthering the best interest in art in the broadest sense of the term.

Alpha Chapter of Kappa Mu Epsilon, a national honor society in mathematics, was established in 1975 to recognize outstanding achievement in mathematics. Its membership is limited to those students who have completed at least three semesters at Bethany, rank in the upper 35 per cent of their class, have completed at least three mathematics courses, including one semester of calculus, and have a grade-point average of 3.0 or better in all mathematics courses.

Kappa Tau Lambda music honorary promotes greater participation and appreciation of music by encouraging attendance at recitals, sponsoring field trips to concerts and providing an opportunity for students of music to meet and exchange ideas. The honorary also encourages greater participation in College musical groups and solo recitals while upholding high standards of musical performance. Qualifications for membership include at least a 3.0 average in eight or more hours of music.

Phi Delta Psi is a physical education honorary for both men and women which encourages scholarship, leadership, fellowship, high educational standards and participation in departmental activities. To be eligible, students must be at the second semester level of the sophomore year and achieve a grade point average of at least 3.0.

Awards

Oreon E. Scott Award is presented to the graduating senior who has achieved the highest academic record over a four-year period of study. The donor of this award was a long-time Bethany trustee and a graduate of the class of 1892.

Anna Ruth Bourne Award stimulates scholarship among the women's social groups. A silver cup, provided by an anonymous donor in honor of the former distinguished head of the English department, is awarded to the recognized women's group whose active membership earns the highest scholarship standing each semester. The group winning the cup for four semesters is presented with a smaller replica as a permanent trophy.

W. Kirk Woolery Award encourages scholarship among the men's social groups. A silver cup, donated by friends of the late Dr. Woolery, a former Dean and Provost of the College, is held by the recognized men's social group or housing organization whose membership (active membership only in the case of fraternities) earns the highest scholarship standing each semester. Any group winning the cup for four semesters is presented with a smaller replica as a permanent trophy.

The Beta Beta Beta — B. R. Weimer Award, established in honor of the late Bernal R. Weimer, Professor of Biology and Dean of the Faculty, is given each year to the senior in biology who has attained the highest academic rank in this field of concentration.

The Beta Beta Beta Prize is awarded the student who has received the highest grades in the initial courses in biology.

Florence Hoagland Memorial Award, given by a graduate of the class of 1944, is presented to the outstanding senior English major. The award honors the memory of the late Miss Hoagland who was for many years Professor of English at Bethany.

Christine Burleson Memorial Award, given by a graduate of the class of 1936, is presented to a senior English major who has attained excellence in this field of concentration. The award honors the memory of the late Miss Burleson who was Professor of English and Dean of Women from 1932 to 1936.

Cammie Pendleton Awards, named in honor of Miss A. Campbellina Pendleton, Professor of Language and Literature at Bethany from 1884 to 1909, are presented to the outstanding junior and sophomore concentrating in English. The awards are given by Dwight B. MacCormack, Jr., of the class of 1956, in memory of his grandmother, Dr. T. Marion MacCormack.

E. E. Roberts Distinguished Prize in Campus Journalism is awarded to an outstanding student who excels in work with one of the student media, in academic work in the Department of Communications, or both.

Winfred E. Garrison Prize is presented in recognition of outstanding achievement in one or more areas of philosophy. The award honors the memory of the late Dr. Winfred E. Garrison, a member of the class of 1892, whose humane concerns and scholarly achievements contributed significantly to the area of higher education, history, and philosophy.

Outstanding Junior Woman Award is provided by the Pittsburgh Bethany College Club, comprising the Bethany alumnae of Pittsburgh. This award is based on qualities of leadership, character, conduct, and scholarship. The club has placed a suitable plaque in Phillips Hall on which names of the winners are engraved. In addition, an individual gift is made to the recipient.

Vira I. Heinz Award is granted to the junior woman who has distinguished herself by leadership, character, conduct, and scholarship and whose proposal for foreign travel most significantly supplements her educational objectives. This award for summer travel is provided by the fund of the late Vira I. Heinz, recipient of the honorary Doctor of Religious Education degree from Bethany in 1969.

Benjamin Chandler Shaw Travel Award is granted to the junior man who has distinguished himself by leadership, character, conduct and scholarship and whose proposal for foreign travel most significantly supplements his educational objectives. This award is funded by an anonymous friend of the College in recognition of the late Dr. Shaw, Bethany's George T. Oliver Distinguished Professor of History and Political Science Emeritus. Dr. Shaw joined the Bethany faculty in 1935, served from 1945 to 1966 as head of the Department of History and Political Science and continued part-time until 1975.

Bettie Blanck Travel Award is made to the student whose proposal for foreign travel best promises to augment study in English literature. The award was established by Thomas A. Hopper, class of 1967, in honor of his mother, a member of the Class of 1944.

W. F. Kennedy Prize is given to the outstanding young man in the junior class. This award, established by W. F. Kennedy of Wheeling, West Virginia, is awarded on the basis of the student's contribution to the College community life through leadership in activities, in personal character, and scholarship.

Pearl Mahaffey Prize is awarded to the outstanding senior major in Languages. The award was established by Mrs. Walter M. Haushalter and other former students of Bethany's emeritus professor of foreign languages. The prize honors Miss Mahaffey, a faculty member from 1908-1949 and a trustee of the College at the time of her death in 1971.

Shirley Morris Memorial Award was established by Theta Chapter of Zeta Tau Alpha in memory of Shirley Morris, a loyal member and past president of the chapter. It is given to an outstanding student in the field of modern languages. Selection is made by the Department of Foreign Languages.

Margaret R. Woods Prize, sponsored by the Kappa Xi Chapter of Sigma Delta Pi, is awarded to the outstanding Spanish major. The prize honors Miss Woods who was a faculty member from 1943 until her retirement in 1965. Selection is made by the Department of Foreign Languages.

Auguste Comte Award is presented to the senior of the Sociology Department for outstanding scholarship and keen interest in the field. The award is named after the founding father of the discipline.

Charles H. Manion Award is made to the outstanding senior art major. The award memorializes Charles H. Manion, long-time trustee of Bethany College who was associated with the steel

industry in the Ohio Valley and who enjoyed painting. The prize is provided by his daughter, Mrs. Leonard Yurko, Weirton, West Virginia.

Theodore R. Kimpton Prize is awarded to the outstanding French student. This prize, which is restricted to those students whose native language is other than French, was established by Theodore R. Kimpton, assistant professor of foreign languages at Bethany prior to his retirement from full-time teaching in 1975.

George K. Hauptfuehrer Award in Music is co-sponsored by the Music Society and Kappa Tau Lambda in honor of George K. Hauptfuehrer, Professor of Music and Head of the Department of Music Emeritus. The award is presented to the Bethany student who has demonstrated musical excellence and has participated actively in campus musical organizations. The award is open to both majors and non-majors, with preference given to upperclassmen.

J. S. V. Allen Memorial is a fund established by the family and friends of Professor Allen to provide for an annual award to the outstanding physics student.

Frank Alfred Chapman Memorial is a fund established by Dr. Stanton Crawford to provide for an annual award to the outstanding history student. Preference is given to students of American history and the Ohio Valley.

Osborne Booth Prize is given to the student who excels in the field of religious studies and in the overall academic program. The late Osborne Booth was T. W. Phillips Professor of Old Testament when he retired in 1964 after 35 years of teaching at Bethany.

Francis O. Carfer Prize is given to the senior who, in the judgment of the Honors Committee, has made the most outstanding contribution to the College. Mr. Carfer, a trustee of Bethany College for 29 years, was a graduate of the class of 1909. Recipients of the award must display sound academic accomplishments and characteristics of loyalty, service, and devotion to Bethany.

W. H. Cramblet Prize recognizes outstanding achievement in mathematics. It is named in honor of Wilbur H. Cramblet, the eleventh president of Bethany College.

John J. Knight Award is presented to the senior male Physical Education major displaying outstanding scholarship and athletic participation during his four years at Bethany.

S. Elizabeth Reed Award is presented to the senior woman showing outstanding scholarship and athletic participation during her four years at Bethany.

Frank Roy Gay Award, established in 1982, is given to the senior interdisciplinary major who maintains a grade point average of 3.5 or above and displays outstanding leadership qualities in the Bethany community. The award is named for the former Professor of Classics at Bethany who taught English literature, religion and philosophy.

A. Kenneth Stevenson Theatre Award is presented each year to the outstanding Bethany junior or senior of any discipline with a grade point average above 3.2 who has contributed

the most significantly to Bethany College Theatre activity. The award also provides for guest artists to enhance the program in Theatre. A. Kenneth Stevenson of Washington, Pa., was a long-time supporter of the Bethany College Theatre program until his death in 1979. Mrs. A. Kenneth Stevenson, her sons, Drew and Mark, both graduates of Bethany, and members of the Department of Fine and Applied Arts make the yearly selections.

Forrest H. Kirkpatrick Award is presented annually to the outstanding senior concentrating in economics and business. The award is named in honor of Dr. Kirkpatrick, long-time dean of the College who is currently serving as adjunct professor of economics.

The Rush Carter Prize in music is presented to a member of the senior class in recognition of outstanding achievement in music. The prize honors the memory of the late Professor Carter who was a member of the Bethany faculty from 1934 to 1945.

The Edna W. Woolery Bibliography Prize is awarded to a senior student and to a freshman student who have individually compiled a bibliography and who request that it be considered for receiving the award. Edna W. Woolery was a Librarian at Bethany during the 1950s. In the event that the Award, established in 1981, is not granted in any year, the funds are used to purchase Library books. Additional information is available from the Librarian.

Wall Street Journal Award is given to the student majoring in Economics who has the highest average in select department courses and has shown strong participation in departmental activities.

Senior Chemistry Award is granted to the senior concentrating in chemistry who has achieved the highest cumulative average in the Department, including the record made on the Senior Comprehensive Examination.

The Thomas R. Briggs Award is presented annually to the senior in psychology who has maintained the highest academic average in the department. The award is a memorial to the late Thomas R. Briggs, Class of 1978, recipient of the Psychology Society Award in 1978.

Society for Collegiate Journalists Award of Merit is presented to an upperclass writer or editor for significant contributions to campus student publications.

WVBC-FM Senior Award is given to the senior who for four years has lent qualities of dedication, loyalty, leadership, talent, and creativity to WVBC's operations.

WVBC-FM Talent Award is presented to the member of the WVBC staff who has offered the most outstanding continuous radio programming during the year.

Freshman Writing Prizes, provided by alumni and awarded by the Department of English, are given annually to authors of the best essays written in Freshman Seminars. Each seminar leader submits the two best essays from the group and the winning essays are determined by a panel of judges.

Research Awards

The Gans Fund Awards are presented to juniors, seniors and graduates of the College who are engaged in approved study and research in some specific field of the sciences at Bethany College or elsewhere. The direct charge is "for the encouragement of research and discovery in the various fields of science." The awards were established by Wickliffe Campbell Gans of the Class of 1870 and Emmet W. Gans in memory of their father and mother, Daniel L. and Margaret Gordon Gans.



Academic Procedures

Course Load

A normal semester load is 16 hours. A student may elect activities courses such as music, chorus, band, physical education, up to two hours with no additional fee charge, making the maximum academic course load 16 hours plus two hours of activities courses. Permission to take additional courses must be obtained from the Dean of the Faculty. Fees will be charged for any such approved courses. Applications for excess hours are available in the Registrar's Office.

A full-time student is defined as any student carrying at least 12 hours per semester.

Independent Study

Each department offers independent study for those students who have demonstrated the ability to work individually in some area of special interest. The student selects an area of study, subject to the approval of the head of the department, after which he or she completes an Application for Independent Study in the Registrar's Office before the start of the semester.

Cross-Listed Courses

When a course which is part of a department's *requirements* for its field of concentration is cross-listed, a student concentrating in that field may register for the course in any department in which it is cross-listed, but the course will count as part of the maximum credit which may be earned by the student within the department of his or her field of concentration.

Course Offerings

Most courses listed in departments are offered annually. Many, however, are offered every other year and a few are offered in three-year cycles. Students should see respective department heads for long-range course planning.

Grading System

Letter grades given and their equivalents in quality points are:

A	4.00
A –	3.75
B +	3.25
B	3.00
B –	2.75
C +	2.25
C	2.00
C –	1.75
D +	1.25
D	1.00
D –	.75
F	.00

Students are required to take at least 100 hours of letter-graded work.

Grades mean: A, *Superior*; B, *Excellent*; C, *Average*; D, *Below Average*; F, *Failure*.

Other report abbreviations and their meanings are:

Cr. *Credit*. No quality points.

NCr. *No-Credit*. No quality points or academic penalty.

F. *Failure*. No quality points; denotes work that is unsatisfactory.

Inc. *Incomplete*. Incomplete work is a result of sickness or some other justifiable reason. An incomplete must be removed by the end of the fourth week of the following semester, unless an extension of time is granted by the Dean of the Faculty. It is not possible for a student to remove an incomplete after 12 months.

W. *Withdrawn*. No penalty.

WF. *Withdrawn failing*. No quality points; indicates a course dropped with permission after the fifth week of the semester, with the student failing at the time of withdrawal. A grade of WF has the same effect on the student's grade-point average as an F.

Any student who carries 12 hours of letter-graded academic work may elect to take additional work on a Credit-No Credit basis in courses which are not used for the field of concentration or the Perspectives Program (or Distribution Requirement), or a Professional Core.

A report of the scholastic standing of students is received at the Registrar's Office at mid-semester in addition to the final semester reports. These reports are sent to the faculty advisor and the parents or guardians of each student.

Probation

The term "on probation" is applied to students who are allowed to continue at Bethany after having failed to meet the standards expected by the faculty and administration. Students may be placed on probation for any of the following causes:

- 1) Unsatisfactory scholastic record. The following academic basis will be used to determine probation each semester: Freshmen must achieve at least 1.7, Sophomores 1.8, and Juniors and Seniors 2.0.
- 2) Unsatisfactory class attendance during the semester or preceding semester.
- 3) Unsatisfactory conduct at any time.

Probation is intended to be a warning to students (and to their parents or guardians) that their record is unsatisfactory and that unless significant improvement is made they will be asked to withdraw from the College. At the end of a semester on probation the student's total record is reviewed. Continued enrollment depends upon the trend of academic performance. The Policy Appeals Board may dismiss any student if the student is not likely to meet the requirements for graduation in the usual period of four years. An extension of the four-year period is granted only when there are extenuating circumstances.



Classification of Students

For sophomore rank a student must have at least 25 hours of academic credit. Admission to full junior standing is conditioned upon the student having at least 60 hours of academic credit. For senior class rank the student must have at least 94 hours of academic credit.

Students are not considered candidates for the baccalaureate degree until they have been granted senior classification, have filed an application to take the Senior Comprehensive Examination in their field of concentration, and have filed an application for a degree.

Change of Schedule

During the first five class days of each semester, a student, with the approval of the advisor, may drop or add any course. No classes may be added after this time. With proper approval, a student may drop a course any time before the final.

Class Attendance Policy

Students are expected to attend all classes and appropriate laboratory meetings of a course and to participate in all outside activities that are a part of the course.

It is the responsibility of individual instructors to evaluate the importance of participation in determination of course grades. Students and faculty should demonstrate concern for each other in attendance matters. The Dean of Students grants excused absences in the event of serious, personal or family emergencies or authorized college events.

Special Examinations

A student justifiably absent from a final examination or a test given in connection with regular class work is permitted to take a special test without payment of fees with the consent of the instructor and approval of the Dean of the Faculty. For any other examination a fee must be paid at the Business Office before the examination is taken, and the proper receipt must be presented to the instructor at the time of the examination.

Withdrawal

An honorable dismissal is granted to students in good standing who may desire to withdraw from the College if they have satisfied their advisor and a responsible officer of the College that there is a good reason to justify such action. Students asking to withdraw should present a written request to the Dean of Students along with a statement of approval from parent or guardian. The recommendation of the Dean of Students is next presented to the Business Manager and then to the Registrar for final record. No withdrawal is considered complete until this procedure has been carried out.

Transcript of Records

Students wishing transcripts of records in order to transfer to other schools or for other purposes should make application to the Registrar's Office at least one week before the transcript is needed. Transcripts are issued only at the request of the student, and official transcripts are sent directly to the college or university specified by the student. One transcript is furnished to each student without charge; for each additional transcript a fee of \$1.00 is charged. When three or more transcripts are ordered at the same time, the first transcript is \$1.00, whereas the others cost \$.50 each. Fees must accompany the request. All financial obligations to the College must be paid before a transcript is issued.



Invalidation of Credits

Courses completed at Bethany or elsewhere, more than 10 calendar years before the date of proposed graduation, are not accepted for credit toward graduation. All candidates are expected to comply with degree requirements in effect at the time of acceptance of the degree application. With the approval of the Policy Appeals Board and the payment of the required fee, the candidate may take examinations, as administered by the various departments, for courses included in the current curriculum, to reinstate academic credit that may have been declared invalid because of date.

Policy Appeals Board

The faculty members who sit on the Policy Appeals Board evaluate student requests for exceptions to regular academic policies and regulations. Student requests are submitted in writing and should include the advisor's recommendation.

Changes in Regulations

Bethany reserves the right to amend the regulations covering the granting of degrees, the courses of study, and the conduct of students. Membership in Bethany College and the receiving of its degrees are privileges, not rights. The College reserves the right (and the student concedes to the College the right) to require the withdrawal of any student at any time.

Courses Index

Professional Core Programs	43
Freshman Studies	44
Accounting	45
Astronomy	46
Biology	47
Chemistry	49
Communications	51
Communications Design	53
Computer Science	54
Economics and Business	56
Education	59
English	67
Fine and Applied Arts	72
Foreign Languages	75
General Sciences	79
Geography	79
Graphics	79
Health Science	80
Heuristics	80
History	81
Interdisciplinary Studies	84
Library	85
Mathematics	86
Philosophy	88
Physical Education	90
Physics	95
Politics and Public Policy	98
Psychology	100
Religious Studies	103
Science Applications (Honors)	106
Social Sciences	106
Sociology and Social Work	107



Course Descriptions

Professional Core Program

The Professional Core Program is an option for every Bethany student. In electing a field of concentration, as well as a Professional Core, students broaden their possibilities for employment and their options for graduate or professional study.

Professional Core programs are available in:

- **Management**
- **Public Affairs (Public Policy/Administration)**
- **Communication (Marketing or Electronic Media)**
- **Science and Technology (Computing or Pre-Professional Science)**

Management: to assist students in describing and determining the roles, reactions and relationships of individuals and groups within a management structure. Students completing this Core should have the capacity to enter a management position in business, public agencies, schools and other organizations with a higher level of understanding and skill in dealing with management issues. Required are 18 hours: Accounting 211, Economics 200 and 280, Psychology 287, Computer Science 100. Six hours are to be taken from Economics 111, 286; Communications 302; Computer Science 140, 144; Politics and Public Policy 227, 300; or Sociology 309.

Public Affairs: to become knowledgeable about the nature of problems in the broad area of public affairs and to be able to deal with issues of public policy and public administration. Completion should enable the student to have a basic capacity to analyze and assess public policy issues and needs, to implement and administer public policy programs, to develop public policy plans and to evaluate public programs. Required are 18 hours: Politics and Public Policy 231, 232, 300; Economics 200, and Computer Science 100. An additional four hours are to be taken from Politics and Public Policy 331, 332; Economics 280, 302; Sociology 205, 309; Psychology 287; Mathematics 281; Communications 402; or Computer Science 140, 144.

Communication: to develop the student's facility to understand and to use techniques of effective communication to wide audiences. Within this core, two options are available, one in Marketing and the other in Electronic Media. Marketing focuses on a variety of communication needs within the world of business and industry. Electronic Media focuses on radio and television as media for mass communication. For Marketing, required are 24 hours from Communications 101, 301, 302; Economics 111 and 290; English 205; Psychology 287. For Electronic Media, required are 22 hours from Communications 101, 201, 261, 271, 304, 310, 311 and Fine and Applied Arts 404.

Science and Technology: to provide a basic knowledge in one of two areas, Computing and Pre-professional Health Science. The Computing option aims at providing a working knowledge of computers, especially as related to the student's regular field of concentration, thus providing job-entry skills not typically available to those studying in traditional liberal arts fields. The Pre-professional Health Science option provides a basic science education for those interested in pursuing health-related professions, including those seeking entrance to schools of medicine,



veterinary medicine professional schools. This curriculum provides the basic elements of what is usually expected of applicants to such schools.

In Computing, 14 hours are required from Computer Science 100, 201, 202, 450; plus any one of the following: Computer Science 140, 142 or 144. In Pre-professional Health Science, 40 hours of course work grouped from Animal Biology, General Chemistry, Organic Chemistry, Physics, Calculus, English. Specific courses should be carefully selected in consultation with the student's advisor and the Health Science Committee and students selecting Pre-professional Health Science must submit a separate list of courses included in their program as worked out with advisors.

Freshman Studies

Interdisciplinary Lecture 100 The Origins of the Modern Western World 4 hours

This course centers on the modern world and its origins and stresses the basic ideas, historical events, aesthetic styles and primary writings which have shaped the modern world.

Freshman Seminar 4 hours

Sec. A Wide World of Sports

This seminar explores the history and production techniques of televised sports coverage as it evolved over two decades, from the early 1960's to the early 1980's. Viewing a number of videotapes and films will illustrate the methods used by the networks to enhance the general audiences' knowledge and understanding of sports events and the personalities of the athletes. (*Edwin Steckel, Associate Professor of Communications and Resident Fellow of Broadcasting*)

Sec. B The Thrill of Victory, The Agony of Defeat

This seminar will explore the role of sports in American society, examining the social, economic, psychological, and recreational functions of both professional and amateur sports. On the basis of this study, students attempt to determine the possible direction for sports in the future and to ascertain the positive and negative results of sports in the present. (*James E. Allison, Associate Professor of Mathematics*)

Sec. C Exploring Christian Worship

This seminar will study the development and variety of ways people have worshipped throughout the history of the church. The investigation will begin with a survey of the Jewish roots of Christian worship and include an examination of the ways people worship God today. (*William B. Allen, College Chaplain*)

Sec. D Crime and Its Detection

A study of crime fiction and film from Conan Doyle to the present. Emphasis on crime fiction as intellectual puzzle, social commentary, and metaphor for the age. Students will examine works by Doyle, Kafka, Chandler, John D. MacDonald and others. They will also engage in simulation games and a mock trial. (*Larry E. Grimes, Professor of English*)

Sec. E The Human Struggle Through Sport

This seminar explores through the medium of sport literature the impact of sport on society and self. In it, students will examine the social and psychological effects on participants and consumers of sport through study of fiction, essays and poetry having a sport motif. Topics include racism, sexism, love, death, age and winning. (*David M. Hutter, Professor of Physical Education*)

Sec. F Adapting Fiction for Stage and TV Production

Students will read short American Southern fiction for the purpose of adapting the works to serve as play or TV scripts to be performed in live or taped productions. The course emphasizes sound reading, effective script writing, and inventive production responsibilities, i.e., direction, and/or performing, designing or producing. (*David J. Judy, Professor of English and Theatre*)

Sec. G No High Ground: The Superpowers in the Nuclear Age

The course will explore two basic themes, interrelated and converging. First, the origins, development, and conduct of the Cold War, and second, the development of nuclear weapons and their impact on superpower diplomacy. (*Gary Kappel, Instructor of Theatre*)

Sec. H Crime and Punishment

A study of the nature and causes of criminals and crime followed by an examination of systems of punishment and rehabilitation will constitute the major activity of this course. Students will also tour prisons and briefly intern in a prison if arrangements can be made (this is a big if). (*John W. Lozier, Associate Professor of History*)

Sec. I Survival: The Will to Live

An inquiry into the nature of human behavior under conditions of extreme stress using both fiction and nonfiction as resources. The seminar also emphasizes academic survival, in particular through training in library research tactics and skills. (*Marc Olshan, Assistant Professor of Sociology*)

Sec. J. The Computer: Fact and Fiction

This seminar seeks to introduce students to computers and computing and to examine some of the implications of computers for human culture and thought. In pursuit of these goals seminar members will learn elementary programming, will learn to use computerized text editing, and will publish a weekly, computerized newspaper for freshmen, *Fresh News*, while readings will range from technical articles to science fiction. (*J. Trevor Peirce, Professor of Psychology*)

Sec. K The Art and Tradition of Storytelling

A cross-cultural exploration of the ancient art of storytelling. Students develop basic library research skills to become familiar with a culture that they select, the oral tradition of that culture, and the role of the storyteller in it. Also, opportunities to learn and practice storytelling techniques for story selection, preparation, and presentation will be included so that all participants will experience the pleasure of a story well told. (*Toni P. Olshan, Reference Librarian*)

Sec. L Physics and Reality

Fundamental to understanding human existence are the interactions of mass and energy in the setting of space and time. This seminar will deal with the few universal laws of physics, that are pertinent to understanding physical observation, measurements, and concepts, and hence, the physical place of humans in the cosmos. (*Edwin Goldin, Professor of Physics*)

Sec. M Computation

A seminar on computation in which the class tiptoes through history (beginning with pre-recorded times) and examines various ways used to represent numbers and to compute with numbers. We will conclude our study with logarithmic computations, and computations using the computer. (*David Brown, Professor of Mathematics*)

Sec. N Education of the Self

Exploration of three areas considered crucial to personal adjustment and growth: the self-concept, relationships and communication, and a meaningful philosophy of life. Through readings and group discussions it is hoped that students will leave the seminar with a greater understanding and acceptance of self and others. (*T. Gale Thompson, Associate Professor of Psychology*)

Sec. O This Old House

This seminar will study old mansions and other historic houses in the local region as an introduction to American architectural history and as a means of discerning the cultural, social and economic forces which shape a region. Students will tour restored houses, analyze the architecture of a neighborhood, visit restoration architects working in the field, survey the history of American residential styles and learn how to discover the story of a house. At least one trip to a historic village is planned. Each student will prepare a photographic and written analytic report of an important historic structure or site. (*Hiram J. Lester, Professor of Religious Studies*)

**Sec. P Sensitivity to the Natural World**

This seminar is an introduction to the natural world based upon the observations of plants and animals in the natural settings. Most sessions will be held outdoors at Bethany and at several nearby, important natural sites. (*Albert R. Buckelew, Jr., Associate Professor of Biology*)

Sec. Q Media Advice from A to A (Abby to Ann)

This course will examine the media phenomenon of advice columns and programs. Concentrating on Dear Abby and Dear Ann Landers, written by the well-known Friedman twins, the class will look at the kinds of advice people seek from media sources. A novel about an advice columnist and the views of professional psychological counselors toward media advice will be examined. Students will write an advice column for the freshman newspaper and produce a television show based on the course's content. (*Harold C. Shaver, Professor of Communications*)

Accounting

Aims

The Department of Economics and Business administers the accounting program to meet the overall purpose of the department to provide knowledge of and solutions to the problem of limited resources. Specifically the accounting program develops an understanding of the functions of accounting, the principles that constitute accounting theory, and the applications of these principles in processing financial information necessary to all economic organizations. The field of concentration in accounting prepares individuals to enter a wide variety of accounting specialties and management positions and to sit for the Certified Public Accountants Examination with an especially strong preparation for its "practices" and "theory" parts. The program also serves as sound preparation for work in government, law, policy planning, and graduate study.

Requirements for Field of Concentration

Forty-six hours in accounting exclusive of the senior project. Required courses are Accounting 211, 212, 312, 313, 314, 330, 352, 415, 425, 441, 461, and 447. Related requirements are Economics and Business 200, 301, and 302, Mathematics 201 and 281, and Computer Science 144. Students concentrating in Accounting are expected to attain a minimum grade of "C" in all courses in the program. If a student receives a grade lower than a "C," the student must arrange an interview with the Head of the Economics and Business Department prior to taking additional upper-level courses.

Acct. 211 Principles of Accounting I 4 hours
Introduces principles and procedures accounting uses to process financial information of various business organizations and to present their Income Statement and Statement of Financial Position to external users of the organizations' financial information. Studies the accounting system's methods of collecting financial information, analyzing it, measuring it, recording it, processing it, and finally presenting it.

Acct. 212 Principles of Accounting II 4 hours
Continues introduction of accounting principles and procedures begun in Accounting 211. *Prerequisite: Acct. 211.*

Acct. 312 Managerial Finance 4 hours
(See Economics and Business 312.)
Prerequisites Acct. 211 and 212.

Acct. 313 Intermediate Accounting I 4 hours
Begins a three-course sequence of accounting. This sequence of courses, together with Acct. 425, constitutes the "bedrock" for a solid foundation in accounting. Mastering these courses is essential for success in accounting. The intermediate accounting sequence provides an intensive and extensive study of accounting principles and procedures as they are applied to various situations and events. Acct. 313 provides a review of Acct. 211 and 212, studies the time value of money, accounting for liquid assets, and accounting for inventories. *Prerequisite Acct. 212.*

Acct. 314 Intermediate Accounting II 4 hours
Continuation of the intermediate accounting sequence. Studies accounting for liabilities and income taxes, operational assets, intangible assets, and corporation capital and earnings. *Prerequisite Acct. 313.*

Acct. 330 Business Law 4 hours
(See Economics and Business 330.)

Acct. 352 Accounting for Not-for-Profit Organizations 4 hours
Study of accounting systems used to process the financial information of economic organizations not having profit as their primary goal. Studies budget preparation and uses and the integration of budgets into the accounting model of assets equalling equities and debits equalling credits. *Prerequisite: Acct. 212.*

Acct. 415 Intermediate Accounting III 4 hours
Conclusion of the intermediate accounting sequence. Studies accounting for long-term investments, bonds, pensions, leases, changes in principles, in estimates, and for errors, presentation of earnings per share, and preparation of the Statement of Changes in Financial Position. *Prerequisite: Acct. 314.*

Acct. 425 Cost Accumulation and Control 4 hours
Together with the intermediate accounting sequence, this course provides the "bedrock" for a solid foundation in accounting. Studies cost accumulation systems: job order and process, absorption and direct; cost controls: flexible budgets and standard costs; and cost, volume, profit relationships. *Prerequisite: Acct. 212 and either Acct. 314 or permission of the instructor.*

Acct. 441 Federal Income Taxation of Individuals 4 hours
Study of federal income tax law and implementing Treasury Department regulations and procedures governing federal taxation of individuals. Provides a general knowledge of federal individual income taxation rather than specific instructions in completing individual federal tax returns. *Prerequisite: Acct. 212 or permission of the instructor.*

Acct. 461 Financial Auditing 4 hours
Integrates several accounting courses. Introduces auditing principles and procedures as they are used to determine the fairness of an organization's financial statements. Studies generally accepted auditing standards, auditors' opinions, internal control, and ethical, legal, and professional responsibilities of auditors. *Prerequisites: Acct. 415 and 425.*

Acct. 477 Senior Seminar 2 hours
A capstone course integrating the student's background, experiences and previous curriculum in accounting. May not be taken before senior year.

Acct. 490 Senior Project 2 hours
Open only to students with a field of concentration in accounting. Preparation of the senior project and its presentation. The topic for the senior project must be approved by the Head of the Economics and Business Department.

Astronomy

(See General Science 201 Astronomy)

Biology

Aims

To acquaint students with the living world around them and with basic life processes; to demonstrate the scientific method as an approach to problem solving; to cultivate an appreciation of research; to develop laboratory skill in various types of work in biology; to prepare students as teachers of biology and for professional fields such as medicine, dentistry, veterinary medicine, and for graduate schools in various biologic disciplines; and to help students find and appreciate their role in the natural environment.

Requirements for Field of Concentration

A minimum of 40 semester hours in the department including the Senior Project. A minimum of 16 semester hours in chemistry, including two semesters of organic chemistry. Eight hours of physics are also required. German or French is recommended for those students preparing for graduate school. A semester of calculus is also strongly recommended. Statistics is recommended for students preparing for graduate work in ecology, wildlife biology, genetics and certain other fields.

Biology majors must complete Bio. 100, Bio. 180, Bio. 280, Bio. 290, and Bio. 308. In addition each major must choose 4 semester hours from each of the following three groups:
Bio. 343, Bio. 425, Bio. 467;
Bio. 228, Bio. 231, Bio. 326;
Bio. 440, Bio. 442



Requirements for Biology as a Second Teaching Field

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach biology in the secondary schools: Bio. 100, Bio. 280, Bio. 167 or Bio. 308, Bio. 210, Bio. 290, Bio. 326 or (Bio. 228 and Bio. 231), Chem. 101, Chem. 102, G.S. 480. See Education Department listings for required professional education courses. Biology majors seeking certification must complete the requirements listed above for biology as a field of concentration as well. A second teaching field is required. G.S. 480 is required for state teacher's certification in biology even if the student has taken Ed. 480 in humanities or social science.

Bio. 100 Modern Concepts in Life Science 4 hours

An introduction to modern concepts of cell biology, metabolism, photosynthesis, nutrition, reproduction, heredity, evolution, behavior, and ecology, emphasizing the process of acquiring biological knowledge. Consideration is given to social and ethical implications of biological issues.

Bio. 102 Horticultural Science 2 hours

Examination of the scientific concepts on which horticulture is based. Emphasis is placed on the study of the plant, the basis of all horticultural activities.

Bio. 105 First Aid as Related to the Principles of Biology 2 hours

Major emphasis is placed on the biological principles utilized in the standard first aid and personal safety course of the American Red Cross. Red Cross certificates may be earned by those passing the examination. Opportunity for instructors' certificates will be presented as an option at the end of the course. Does not fulfill distribution requirements in the physical and life sciences. (May be taken for credit as Physical Education 226.)

Bio. 167 Introduction to Mammalian Anatomy and Physiology 4 hours

Mammalian anatomy as exemplified in the cat. Discussion and study of the functioning of the tissues and organ systems of the human body, lab study of the anatomy of the cat, the human physiology. Not open to biology majors. *Prerequisite: Bio. 100. May be taken for credit as P.E. 167.*

Biol 180 Invertebrate Zoology 4 hours

A structural, functional and evolutionary study of the major invertebrate phyla.

Bio. 205 Emergency Medical Training 4 hours

The medical, communication, transportation records, and report instructions required for certification by the West Virginia Department of Health as an emergency medical technician. Red Cross advanced first aid certificates may be earned by those passing the examination. Does not fulfill distribution requirements in the physical and life sciences.

Bio. 210 Evolution 2 hours

Evidence for the theories of evolution with special attention to the modern synthesis of genetic and ecological factors. *Prerequisite: An elementary course in biology or permission of the instructor.*

Bio. 228 Field Botany 2 hours

Introduction to the taxonomy of vascular plants with emphasis on the local flora, including the techniques of herbarium science.

Bio. 231 Ornithology 2 hours

Anatomy, behavior, and identification of birds.

Bio. 270 Nutrition 4 hours

An examination of nutrients, metabolic pathways, integrated functions, and nutritional requirements that are necessary to maintain life. These basic principles will then be used to examine nutritional issues.

Bio. 280 Botany 4 hours

A study of plant life including the evolution of the various groups of plants, the morphology and anatomy of vascular plants, and the fundamental life processes of plants.

Bio. 290 General Genetics 4 hours

A synthesis of basic principles and modern molecular theory.

Bio. 308 Comparative Vertebrate Anatomy 4 hours

Comparative anatomy of the representative forms of vertebrates; lab study of the comparative anatomy of the shark, other lower vertebrates, and the cat.

Bio. 326 Ecology 4 hours

Study of the general principles of ecology of microorganisms, plants and animals. Special emphasis is placed on field study of several communities. *Prerequisite: Bio. 100 and Bio. 101 or permission of the instructor.*

Bio. 343 Microbiology 4 hours

Morphology and physiology of microorganisms; principles of lab technique; cultural characteristics and environment influences on microbial growth.

Bio. 425 Animal Physiology 4 hours

Structure and functions of the human body; the mechanism of bodily movements, responses, reactions, and various physiological states.

Bio. 440 Histology-Microtechniques 4 hours

Structure of the cell, its modification into various tissues, and the practice of general histological techniques.

Bio. 442 Embryology 4 hours

Study of the ontogenetic development of selected embryos. Major emphasis is on the vertebrates.

Bio. 467 Cell Physiology and Biochemistry 4 hours

Introduction to the structural organization of cells and the important aspects of cell physiology in the light of modern biochemistry and biophysics. *Prerequisite: Chem. 211-212 or permission of the instructor.*

Bio. 480 Methods and Materials in Teaching Physical and Life Sciences 4 hours

For course description see General Science 480. (May be taken for credit as Education 480.)

Bio. 487-488 Independent Study 2 or 4 hours each

Bio. 490 Senior Project 2-8 hours

Starts the first semester of the junior year and is to be completed in the spring semester of the senior year.

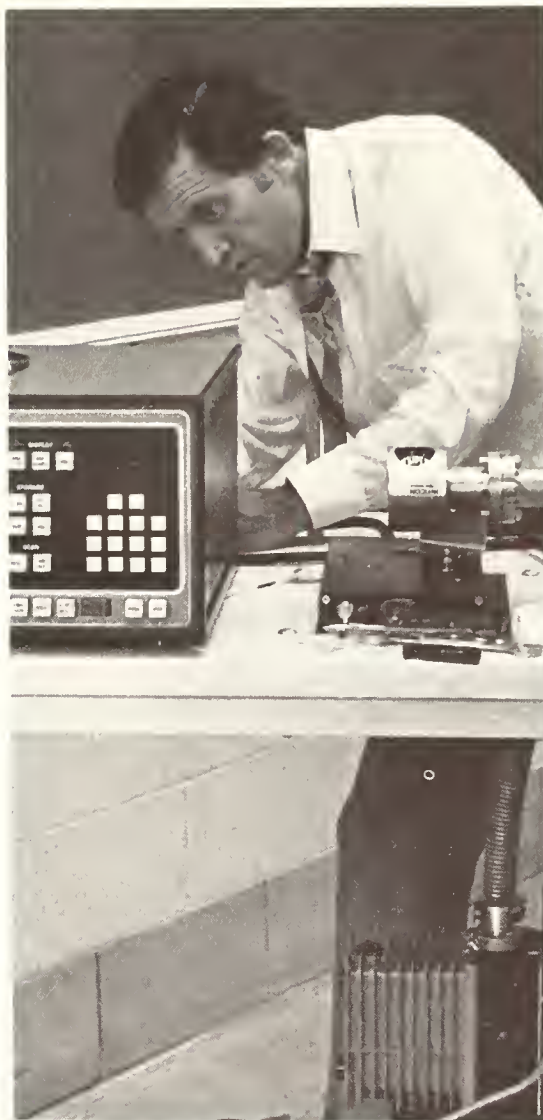
Chemistry

Aims

To contribute to the student's general knowledge and understanding of the nature of the physical world and his or her understanding of the place of chemistry in industrial and business life; to provide experience in the scientific method of reasoning; and to provide students concentrating in this field with a thorough and practical education in chemistry which may be useful in industrial, technical, and graduate work.

Requirements for Field of Concentration

A minimum of 36 hours in the department exclusive of the Senior Project. The distribution must include Chemistry 101, 102, 211, 212, 226, 324, 326, 402, 414, 421, plus four hours of electives and at least four hours of Senior Project; Mathematics 201, 202; Physics 201, 202; and at least two hours from the group of Computer Science 140, 142, Physics 221, 261, 300, Mathematics 203, 341. Students who plan to do graduate work in chemistry will demonstrate a reading knowledge of chemical German, French, or Russian. Additional courses in mathematics are also strongly recommended. All course in chemistry as well as the indicated courses in mathematics and physics must be taken for a letter grade. For those students for whom it might be advantageous, a



program of study is offered consistent with the most recent standards laid down by the American Chemical Society.

The entering freshman who is interested in chemistry should select Chemistry 101 and mathematics at the appropriate level. Programs for subsequent semesters must be decided in conference with the faculty advisors for chemistry. Students planning to take the MCAT are strongly advised to take a course in the history of the fine arts during their fourth or fifth semesters.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach Chemistry in secondary school: Chem. 101, 102, 211, 212, 222, Physics 201, 202, G.S. 480,

and select six hours from the following: Chem. 224, 314, 323, 402, 414. See Education Department listings for required courses in Professional Education. A second teaching field is required.

Chem. 100 Consumer Chemistry 4 hours
(See General Science 100.)

Chem. 101 General Chemistry and Inorganic Qualitative Analysis 4 hours
Study of theoretical and descriptive inorganic chemistry. The lab work is primarily a study of the principles and practice of a systematic qualitative scheme of analysis for the cations and anions. *Three lectures and three hours of lab per week. Prerequisites: two units of mathematics or concurrently with Math 103.*

Chem. 102 General Chemistry 4 hours
Continuation of the lecture portion of Chem. 101. Study of solubility and acid-base phenomena in aqueous systems with appropriate lab work. *Prerequisite: Chem. 101.*

Chem. 211-212 Organic Chemistry 4 hours each
Introduction to the study of the organic compounds of carbon, both aliphatic and aromatic, involving a considerable amount of the electronic mechanisms of organic reactions. Lab work consists largely of organic preparations. *Three lectures and three hours of lab per week. Prerequisites: Chem. 101, 102.*

Chem. 226 Physical Chemistry I 4 hours
Introduction to the concepts and experimental techniques of classical thermodynamics with special emphasis on the concepts of enthalpy, entropy and free energy. A study of the different energy states of atoms and molecules. The statistical principles governing the distribution of particles within these states and the transitions between states.



Chem. 311 Bonding and Symmetry in Organic Chemistry 2 hours

Introduction to group theory and simple molecular orbital calculations as they apply to organic chemistry and to the spectra of organic compounds. Emphasis is placed on problem solving and structural determinations from spectroscopic data.

Prerequisite: Chem. 226 or permission of the instructor.

Chem. 314 Introduction to Biochemistry 2 hours

Study of the chemistry of some of the more important biological processes with emphasis on reaction mechanisms and methods of elucidation. *Prerequisite:*

Chem. 212.

Chem. 324 Electrochemistry 4 hours

Study of oxidation-reduction and phenomena associated with solutions of electrolytes, application of these principles including classical electrochemical analysis, and the measurement of basic physical parameters.

Prerequisite: Chem. 226.

Chem. 325 Chemical Instrumentation

2 hours

The theory and practice of selected methods in chemical instrumentation. Special emphasis will be placed on those methods not covered in other courses and on methods helpful for completion of Senior Projects.

Prerequisite: Chem. 226.

Chem. 326 Physical Chemistry II

4 hours

Study of rate processes, especially in the liquid phase, and consideration of special problems associated with the liquid and solid states.

Chem. 402 Advanced Inorganic Chemistry 2 hours

Chemistry of certain elements and their compounds is studied and interpreted on the basis of modern theories of atomic and molecular structure. The necessary foundation in quantum mechanics is reviewed. *Prerequisites:* Chem. 222, 224.

Chem. 411 Physical Organic Chemistry

2 hours

Study of the theories and techniques relating structure and properties of organic compounds. *Prerequisites:* Chem. 212; Chem. 222 or permission of the instructor.

Chem. 414 Advanced Organic Chemistry 2 hours

Study of selected advanced topics in organic chemistry including reaction mechanisms.

Lab is introduced, where appropriate, and stresses the use of instrumentation.

Prerequisites: Chem. 212; Chem. 226 or permission of the instructor.

Chem. 430 Special Topics 2 hours each

Series of three courses devoted to the consideration of advanced topics and areas of special interest in the fields of Inorganic Chemistry (430-A), Organic Chemistry (430-B), and Physical Chemistry (430-C).

Prerequisite: Permission of the instructor.

Chem. 477-478 Seminar in Chemistry

2 hours

Presentation of current research topics by students, faculty and visiting lecturers.

Chem. 480 Methods and Materials in Teaching Physical & Life Sciences

4 hours

For course description see General Science 480. (May be taken for credit as Education 480.)

Chem. 487-488 Independent Study 2 or

4 hours each

Chem. 490 Senior Project 4-8 hours

During the junior year the chemistry major is introduced to the methods of employing the chemical literature, selects a topic for advanced investigation, and makes a literature search of background material as a basis for an in-depth study in this area. There is one class meeting each week for both semesters. Following this preliminary work, an investigation of a significant topic in chemistry is made by each senior under the direction of a faculty member in the department. This work culminates in a written and oral report at the end of the senior year. *Fee:* \$20.



Communications

Aims

To prepare students for careers in the fields of advertising, magazines, newspapers, public relations, radio and television by developing the skills necessary for professional-level performance; to help students analyze and understand all forms of written and oral communications directed toward a variety of audiences; to instill a sense of ethical and legal responsibility among future professional communicators.

Requirements for Field of Concentration

Communications 101, 201, 206, 304, 403, 420; either 204 and 303, or 261, 271, 310; one of the following: 207, 350 or 402; either 301 or 302.

In addition, students will complete a Senior Project; work for at least one semester on a campus publication, Cable 3 or WVBC-FM; complete a department-approved internship in the mass media, advertising or public relations; take 12 hours in English courses and/or foreign language literature courses; take Philosophy 124;

and achieve a proficiency in reading a foreign language at the 200 level.

Normally students take 101 and 206 as freshmen. Appropriate courses outside of the department, including helpful Core programs, can be recommended by advisors in the Communications Department.

It is recommended that students in the department complete one of the following tracks: Advertising, Broadcasting, Print Journalism, or Public Relations. Details of these tracks are available in the office of the Head of the Department.

Students seeking careers in Commercial Art, Television Graphics, or Communication Design may take advantage of the interdepartmental program developed between the Communications Department and the Fine and Applied Arts Department. See the respective department heads for requirements.

Students must have achieved at least sophomore standing for enrollment in any of the 300- and 400-level courses in the department.

Comm. 101 Introduction to Mass Communications 4 hours
History and theory of mass communications. Role of newspapers, magazines, radio, television, books, movies, and adjunct agencies in modern society. Effects on audiences.

Comm. 201 Beginning Reporting 4 hours
Study and practice of basic journalistic writing skills, including grammar and sentence construction as they relate to news writing. Basic reporting skills will be emphasized. A typing speed of 35 words per minute will be required to pass this course.

Comm. 204 Copy Editing and Layout 4 hours
Principles and practice in editing copy for publications; includes typography, layout, design of letterpress and offset newspapers, and use of computers. *Prerequisite: Comm. 201.*

Comm. 206 Interpersonal Communication: Public Speaking 4 hours
Introduction to the dynamics of communication: levels of interaction between speaker and listener. Developing the use of voice and non-verbal signals; understanding oral style in language and logical argument in public speaking. Focus on the design and delivery of short speeches and on critical listening. (May be taken for credit as Fine and Applied Arts 203.)

Comm. 207 Theory of Interpersonal Communication 4 hours
Introduction to verbal and nonverbal interaction in dyads and small groups. Examination of perception, self-concept, awareness, use of language, listening and feedback as they affect oral communication. Practice and analysis of interpersonal skills.

Comm. 220-J Caribbean Journalism 2 hours
Study of the mass media and their impact economically, socially, politically, religiously, and educationally on the various Caribbean groups. The course deals with the media in the Virgin Islands, Puerto Rico, Cuba, Haiti, Dominican Republic, and the Caribbean Commonwealth nations. *January term only.*

Comm. 261 Radio Production 2 hours
Basic audio production and performance techniques for radio. Laboratory experience in the WVBC radio studios.

Comm. 271 Basic Television Production 2 hours
Basic video production and performance techniques, both in studio and on location. Topics include studio operations, camera operation, floor direction, remote production techniques and videotape recording technology. *Prerequisite: Comm. 261.*

Comm. 272 Intermediate Television Production 2 hours
Intermediate video production and performance techniques. Laboratory experiences in technical direction, program direction, video editing and script writing. Leadership skills developed through instruction on production personnel management and budgeting. *Prerequisite: Comm. 271*

Comm. 295 Publication Photography 4 hours
Introduction to the knowledge, skills, and techniques needed to produce quality black-and-white photographs for publication. Course covers both visual communication techniques and basic design and aesthetic concepts. Emphasis is on learning to meet specific newspaper and other publications' photographic requirements effectively. Two lectures and one four-hour lab per week. *Prerequisite: Comm. 201 and junior standing.*

Comm. 301 Principles of Advertising 4 hours
Study of history, philosophies and principles of advertising. Media, markets and merchandising. Role and evaluation of advertising. Stress on copy writing and layout.

Comm. 302 Principles of Public Relations 4 hours
Study of public relations as a process involving research, planning, communication and evaluation. Analyzing publics and influencing their opinions. History, contributions, effects, laws and ethics of the field. Development of a public relations plan for an organization.

Comm. 303 Advanced Reporting 2 hours
Continuation of and building on the skills introduced in Beginning Reporting. Emphasis on reporting techniques, development and use of news sources and writing of various types of stories. *Prerequisite: Communications 201.*

Comm. 304 Law of Mass Communications 4 hours
Study of the legal rights and limitations of the mass communications media in the United States.

Comm. 306 American Magazines 2 hours
Role and contributions of U.S. magazines, historically and currently. Trends in writing style, editing, production, layout, advertising, promotion, reader research, and circulation. Practice in writing three articles for a professional journal and general circulation magazines.

Comm. 307 Interpersonal Communication: Oral Interpretation 2 hours
Development of voice and nonverbal skills to interpret prose, poetry and dramatic literature in oral presentation. Techniques for platform and microphone. Projects will demonstrate facility in transmitting meaning for public performance. *(May be taken for credit as FAA 307.)*

Comm. 310 Advanced Broadcast News Reporting 2 hours
A lecture-laboratory course dealing with the complexities of the electronic news gathering process. Emphasis on the use of state-of-the-art technology and its affects on news content and story organization. Field trips to local stations and guest speakers from the media. Students will be required to gather and report news using the technology associated with radio, television and cable. *Prerequisites: Comm. 201 and 271.*

Comm. 311 Broadcast Management 4 hours
Managing the radio/television station including administration, sales, promotion and programming, with applications to network, cable and public broadcasting.

Comm. 320 Public Relations Writing 2 hours
Practice in the styles of writing used in public relations, including publicity, publications copy, scripting for audio and audio/video productions and public relations advertising. *Prerequisite: Comm. 302.*

Comm. 325 Public Relations Case Problems 2 hours
Application of the principles of public relations to actual and hypothetical cases. Consideration of practical, ethical and legal implications of decisions made while managing public relations operations. *Prerequisite: Comm. 302.*

Comm. 335 School Publications 2 hours
Practical course in which class members do reporting, editing, and layout work. Editorial and design problems of high school, college yearbooks, catalogs, and literary journals are also considered with school periodicals as examination pieces.

Comm. 340-345 Special Topics in Mass Communications 2 or 4 hours

Comm. 350 Persuasion 4 hours
Concentrated study of persuasion theory. Topics include; learning theory, consistency theories, social judgment theory, motivation, the enthymeme, counterattitudinal advocacy, role-playing and inducing resistance to persuasion. *Prerequisite Comm. 206.*

Comm. 355 Advanced Public Speaking 4 hours
Focuses on specific types of speeches and rhetorical situations. Special emphasis is given to speechwriting and to the actual delivery settings for these speeches. Speeches include: introduction, nomination and acceptance, eulogy, after-dinner, impromptu, question response, sales presentation, reports, etc. *Prerequisite: Comm. 206.*

Comm. 361 Advanced Radio Production 2 hours
Advanced production and performance techniques for the radio broadcaster. Laboratory experiences in the WVBC radio studios. *Prerequisite: Comm. 261.*

Comm. 371 Advanced Television Production 2 hours
Integration of the technical and creative skills necessary for broadcast television production, both in studio and on location. Definition of creativity and its role in broadcast television. *Prerequisite: Comm. 272.*

Comm. 383 Advertising Creativity 4 hours
Principles and practices of writing copy for the print and electronic media. *Prerequisite: Comm. 301.*

Comm. 384 Advertising Media Buying 2 hours
Study of the process of developing an advertising media plan. Extensive analysis and use of audience and marketing data for the print and broadcast media. *Prerequisite: Comm. 301.*

Comm. 385 Advertising Media Selling 2 hours
Theory and techniques of selling print and broadcast media to advertisers. Salesmanship, including presentation techniques. *Prerequisite: Comm. 301.*

Comm. 401 History of American Mass Communications 4 hours
History of newspapers, magazines, books, radio and television as well as the related areas of public relations and advertising in the United States.

Comm. 402 Public Opinion 4 hours
The nature and significance of public opinion. Includes studies of public opinion formation and measurement, the roles of news media, advertising, censorship, propaganda, political indoctrination, and other factors.

Comm. 403 International Communications 2 hours
Comparative media systems: theory and practices in print and electronic media, advertising, public relations and journalism education in Europe, Asia, Latin America, the Middle East and Africa.

Comm. 404 Direct Response Advertising 2 hours
Study of theory and techniques of direct response advertising and promotion. Preparation of an original project and/or service of a profit or non-profit institution. *Prerequisite: Comm. 301.*

Comm. 405 Public Relations Campaigns 2 hours
The handling of an organization's public relations program or an organization's special public relations campaign, including researching and analyzing the public relations situation, planning the program or campaign, and developing the various communications tools to be utilized. A competitive public relations agency model is used. *Prerequisite: Comm. 320 or 325.*

Comm. 406 Advertising Campaigns 2 hours
Development of an advertising campaign including situation analysis, strategic advertising plan and some execution of specific creative and media tactics. A competitive agency model is used. *Prerequisite: Comm. 301, 383, or 384.*

Comm. 420 Professional Internship 2 hours
Professionally supervised experience with an off-campus media organization or a communications agency. Assignments will allow for application of classroom materials and campus media experiences and will be similar to those experienced by new communications professionals. Minimum of 160 hours required. Generally taken as a senior. *Prerequisites: Two on-campus media experiences and a professional observation. (Details about prerequisites available from the Department of Communications.)*

Comm. 487-488 Independent Study 2 or 4 hours each

Comm. 490 Senior Project 2-8 hours

Communication Design

(See Fine and Applied Arts 302, 303, 304, 404, 405, and 406.)

Computer Science



Aims

To help students 1) recognize problems that can be solved with the aid of a computer; 2) write structured programs in a reasonable amount of time that work correctly, are well documented, and readable; 3) determine whether or not they have written an efficient and well organized program; 4) assess the implications of work performed either as an individual or as a member of a team; 5) understand basic computer architectures; 6) understand how the process of modern operating systems cooperate and compete with each other as they perform their functions. To prepare students to 7) pursue in-depth training in one or more application areas of computer science; 8) further their education in computer science; 9) gain employment in some computer related capacity.

Requirements for Field of Concentration

I. Computer Science 201, 202, 280, 290, 330, 370, 380, 478, and 490

II. Mathematics 201, 202, 281, and 354.

CS 100 Computers and Society 2 hours

The impact of computers and computer systems on society is studied. Current topics such as the following are covered: the impact of computers on employment; automation and the labor force; overview of computer applications in government, medicine, education, etc.; social issues – ethics, information banks, privacy and the Freedom of Information Act, computer abuses; the future – a cashless society and computers in the home. (May be taken for credit as Soc. 105.)

CS 140-150 Introduction to Programming

2 hours each

The following courses provide an introduction to computers by programming in a high level language on the Prime computer. The emphasis is programming real-life problems using efficient coding techniques. These courses are directed towards the student who wants to use the computer as a problem-solving tool.

CS 140 Introduction to Programming Using BASIC 2 hours

This course is directed toward the non-science student. Not recommended for students who have successfully completed any other computer language course.

CS 142 Introduction to Programming Using FORTRAN 2 hours

The programming assignments in this course will involve applications to science problems.

CS 143 Introduction to Programming Using PL 1 4 hours

Programming assignments in this course will involve applications to science problems.

CS 144 Introduction to Programming Using COBOL 4 hours

Programming assignments in this course will involve applications to business problems.

CS 145 Introduction to Programming Using RPG II 2 hours

Programming assignments in this course will involve applications to business problems.

CS 200 Computer Applications in the Social Sciences 2 hours

A study of computer techniques applied to social and behavioral sciences. Topics include language selections, matrix manipulation, statistics (basic), analysis of variance, correlations and regression, econometrics, and profit analysis packages.

CS 201 Computer Science 1 4 hours

This beginning course for computer science majors may also be taken by others who wish to learn the language. The emphasis is on techniques of algorithm development, structured programming and debugging techniques as they apply to the Pascal language.

CS 202 Computer Science II 4 hours

An introduction to operating systems, data structures and computer organization and files. The data base management system INFO will also be discussed. The programming assignments will provide the students with advanced features of PASCAL and an introduction to PL1, another structured language. *Prerequisite: CS 201.*

CS 222 Digital Electronics 4 hours

An introduction to digital electronics with applications in instrumentation and computer electronics. Topics include Boolean Algebra, basic gates, logic families, encoders-decoders, astable/monostable multivibrators, flip-flops, counters, readouts, shift registers, bi-directional bus structure,

serial-parallel/parallel-serial data conversion, D to A and A to D conversion. *Prerequisite: Math 103 or equivalent or permission of the head of the department.*

CS 280 Assembly Language 4 hours

A study of assembly language programming methods. Topics include computer organization, assembly process, assembly coding, addressing, binary arithmetic, storage allocation, character and bit manipulation, and debugging techniques. *Prerequisite: CS 202.*

CS 290 Data Structures 4 hours

Basic data concepts and their representation. Linear lists, strings and string processing, algorithms, and arrays. Storage allocation and representation of arrays. Storage systems and structure, and storage allocation and collection. *Prerequisite: CS 202.*

CS 310 Discrete Structures 4 hours

Fundamental algebraic, logical, and combinational concepts of computer science. Topics include graph theory, monoids and finite automata, lattices and Boolean algebras.

CS 330 Computer Organization 4 hours

Application of Boolean algebra to combinational circuit design problems. Organization of simplified computer components. Adders, arithmetic and logical units, memory organization. Architecture and physical realization of computer systems. *Prerequisite: CS 202.*

CS 370 Operating Systems 4 hours

Batch processing systems. Implementation techniques for parallel processing of input/output and interrupt handling. Memory management, system accounting, interprocess communication and interfaces, and deadlocks. *Prerequisite: CS 280.*

CS 380 Introduction to Data Base Design 4 hours

This course presents an in-depth study of the design and the implementation of a data base. Topics include architecture of a data base, the three approaches (relational, network, and hierarchical) to a data base. *Prerequisite: CS 290.*

CS 390 Numerical Analysis

4 hours
(See Mathematics 390.)

CS 400 Interactive Computer Graphics 4 hours

A study of graphics on the microcomputer using Turtle Graphics and the UCSD PASCAL. *Prerequisite: One high level language other than BASIC.*

CS 410 Computer Simulation 2 hours

Simulation methodology including generation of random numbers and variates, analysis of data generated by simulation experiments, and validation of simulation models. Introduction to queuing theory. Selected simulation applications. *Prerequisite: CS 202 and Math 281 or Math 383.*

CS 450 Data Base Concepts 2 hours

Introduction to the concept of a data base. Topics include data organization and structure data security. Also discussed will be a comparison of data base approaches and access methods. Some programming assignments will be given in INFO, the data base management system on our PRIME. *Prerequisite: CS 202.*

CS 460 Programming Language Structures 4 hours

This is a course in programming language constructs emphasizing the run-time behavior of programs. Topics include: formal grammars, parsing, information binding, data storage, global and local variables and parameters, string handling and list processing. *Prerequisite: CS 202.*

CS 478 Senior Seminar 2 hours

Current topics in computer science.

CS 482 Computers in Education 2 hours

Students will become familiar with the microcomputers and some software available for classroom use. Methods for evaluating software will be discussed. Students will design classroom applications using LOGO or some other software package. *Prerequisite: Permission of Instructor.*

CS 487/8 Independent Study 2 or 4 hours

CS 490 Senior Project 2-8 hours hours

Economics & Business

Aims

To help students understand how the struggle to provide for human needs and wants in a world of limited resources is related to the wide range of problems of the human race; to provide basic knowledge and develop proficiency in the use of analytical tools pointed toward solving the economic problems of business, government, and society. The courses offered serve as preparation for work in business, government, law, environmental planning, public service, and graduate study.

Requirements for Field of Concentration

All students will take a minimum of 26 hours of courses in the department exclusive of the senior project.

Required courses are: Econ. 200, 280, 290, 301, 302, 312, and 477. Related required courses are: Accounting 211 and 212, Mathematics 201, 281, and 282, and Computer Science 144.

Students considering economics as a field of concentration should complete by the end of the sophomore year:

Econ. 200, Acct. 211 and 212, Math. 201 and 281.



Students concentrating in Economics and Business are expected to attain a minimum grade of "C" in all courses in the department. If a student receives a grade lower than a "C," the student must arrange an interview with the head of the department prior to taking additional upper-level courses.

Econ. 101 Personal Finance 4 hours
Objectives of this course are to develop an understanding of the concepts needed for intelligent consumer decision-making. Concentration on budget policies, borrowing, installment buying, marketing techniques, and consumer purchases in the areas of food, clothing, automobiles, housing, social insurance, personal insurance, pension programs, investment markets, and estate building. (Not recommended for students with a field of concentration in Economics and Business.)

Econ. 111 Introduction to Business 2 hours
Structure, procedures, and objectives of the business system; economic and social environments of business; role of business in our culture.

Econ. 200 Principles of Economics 4 hours
Introduction to the inevitable problems associated with scarcity. Alternative methods of settling economic questions, with special emphasis placed on the functioning of the market system. Pricing, output determination, monopoly power, wage controls, and price fixing in relation to contemporary issues. The student is also introduced to problems of money and banking, growth, the labor movement, and business operations. Students will read broadly from non-technical literature as well as conventional text materials.

Econ. 280 Management 4 hours
Study of the management process; planning, organizing, staffing, controlling, decision-making and group dynamics. *Prerequisite: Econ. 200.*

Econ. 284 Operations Management 4 hours
Study of operations that use human, material and energy resources to create products and services. A system approach will emphasize that all parts of the conversion process are interrelated and that the principles can be applied to many kinds of organizations. Analytical, mathematical and decision-making skills will be developed. *Prerequisite: Econ. 200.*

Econ. 286 Personnel Management 4 hours
An examination of personnel management as a dynamic network of processes, systems, and conditions that affect all organizations and the people in them. In particular, the course treats extensive application of theory, research, and practice to job design, staffing, training and development, appraisal compensations, leadership, organizational justice, and collective bargaining.

Econ. 287 Organizations and Human Behavior 4 hours
This course seeks to improve effectiveness of organizations by strengthening human processes. It explores specific aspects of organizational culture such as motivation, conflict, power, and leadership; exercises and simulations are emphasized. (May be taken for credit as Psych. 287.)

Econ. 290 Principles of Marketing 4 hours
Marketing function of the manufacturer, wholesaler, jobber, retailer, mail order-house, chain store and other marketing institutions; cost of distribution; problems of marketing management and planning; and modern trends in marketing. *Prerequisite: Econ. 200.*

Econ. 300 Business and Society 4 hours
Interface of business with government and society; management action in situations involving significant political and social factors; the changing role of business. Open only to juniors and seniors.

Econ. 301 Price Theory 4 hours
Advanced study of resource allocation, price determination, output determination, and income distribution at the level of the individual firm under various market conditions. Mathematical analysis and model building will be used, whenever appropriate. *Prerequisite: Econ. 200, Math 201, 281.*

Econ. 302 Public Economic Policy 4 hours
Advanced study of the determinants and behavior of the national economy which will include consideration of production, employment, and price levels. Mathematical analysis and model building will be used whenever appropriate. *Prerequisite: Econ. 200.*

Econ. 312 Managerial Finance 4 hours
Study of corporate organizations and the planning of financial requirements. Intensive study of cash flow, budgeting, capital decisions, internal financing, and corporate reorganization. (May be taken for credit as Acct. 312.) *Prerequisites: Acct. 212, Econ. 200, Math 281.*

Econ. 316 Money, Banking, and Fiscal Policy 4 hours
Various money markets; the operation of commercial banks, Federal Reserve System, and the Treasury Department including an analysis of tax revenues, expenditures, and debt-financing. *Prerequisites: Acct. 212, Econ. 200.*

Econ. 325 Investment Management 4 hours
Critical study of the various types of investment instruments and the relative merits of each, investing procedures, security analysis, security ratings, portfolio theories, and portfolio analysis. *Prerequisites: Acct. 212, Econ. 200, Math 281.*



Econ. 330 Business Law 4 hours
Introduction to the nature and development of law, the legal aspects of contracts and other business instruments as set forth in the Uniform Commercial Code, and some aspects of partnerships and corporations. (May be taken for credit as Acct. 330.)

Econ. 341 Labor 4 hours
General course in labor economics, with an emphasis on trade unionism; history and objectives of organized labor; employment and wage theory; managerial labor policies; collective bargaining; current social, economic and political aspects of labor management relations; and labor law.
Prerequisite: Econ. 200.

Econ. 360 International Trade and Transnational Marketing 4 hours
Principles of international trade and finance and their application to the modern world; emphasis on transnational marketing strategies, problems and issues; theory of comparative advantage; exchange rates, monetary standards, tariffs, quotas, and commercial policy; capital movements; aid to less developed countries; geographic origin and direction of trade routes and products.
Prerequisite: Econ. 200.

Econ. 399 Junior Seminar 2 or 4 hours
Opportunity for interested students and faculty to explore some aspect of economics or business not covered in the curriculum. Students must be prepared for advanced work.

Econ. 477 Senior Seminar 2 hours
A capstone course integrating the student's background, experiences and previous business and economics curriculum through case studies and simulation exercises.

Econ. 487-488 Independent Study 2 or 4 hours each

Econ. 490 Senior Project 2-8 hours
Open only to students with a field of concentration in the department. Preparation of the senior project and its presentation. Time will also be devoted to review for the senior comprehensives. The topic for the senior project must be selected before the end of the junior year and be approved by the head of the department.

Education

Aims

To develop a teacher who is a self-directing decision maker who recognizes the need for personal and professional growth, has the skills necessary to pursue it, and is secure enough to engage in personal and professional self-evaluation.

To develop a teacher who recognizes the needs of young persons and is able to utilize both the liberal arts background and principles of teaching in attempting to meet those needs today. The teacher also analyzes emerging trends and thinks critically about them in an attempt to arrive at a more human balance between the teacher's needs and the student's needs.

To develop a teacher who has the skill and willingness to communicate, in the deepest sense of the word, with people of all ages and backgrounds.

In summary, the teacher is a perceptive and aware person who can utilize intellectual skills and knowledge to think critically and pursue self-directed goals. In addition, the academic degree program prepares young people for non-public school education related positions.

Requirements for Teacher Education

A student preparing for elementary, middle childhood or secondary school teaching must plan to complete: (1) the requirements for graduation described on page 20, (2) a selection of courses providing appropriate background for teaching in a particular field, and (3) a sequence of professional education courses and experiences designed to give a broad understanding of concepts and skills in teaching. Bethany is accredited by the National Council for



Accreditation of Teacher Education (NCATE) and is a party to the interstate compact for reciprocity in certification by the preparation of students for certification in the State of West Virginia.

To become eligible for teacher certification, the student must complete a college and state-approved program. It is the student's responsibility to seek appropriate counseling from the Education Department, preferably early in the freshman year, and to

become familiar with all of the requirements.

The department recognizes abilities which students may already have in a given subject matter area and assists them in planning their program accordingly. Waivers or advanced standing granted by the College can be noted on official transcripts so that courses from which a student is exempted may be applied toward certification.

Leadership of children and youth groups, e.g., summer camps, scouts, church school, playground supervision, etc., is strongly recommended.

A period of observation and participation in a school is an important and integral part of the education curriculum. Education students are encouraged to consider observation and participation in an educational agency when planning their intercultural and/or citizenship practicum.

Professional Education

Students preparing to teach at any level must complete the sequence of required professional courses. Required courses cannot be taken credit-no credit.

First Semester	Credit	Second Semester	Credit
Freshman			
Psych. 100 General Psychology	4		
Sophomore			
*Ed. 201 Human Development I	4	Ed. 202 Human Development II	4
		Ed. 242 Principles and Curriculum in the Public Schools	2
(Students must apply for admission to Teacher Education during Ed. 242)			
Junior			
Appropriate methods course(s)	2-4	Ed. 347/348/349 Professional Practicum	2
		Appropriate methods course(s)	2-4
(Students must apply for Professional Block during Ed. 347/348/349)			
Senior Professional Block			
Sp. Ed./Psych. 410 Test and Measurements	2	Ed. 340 Reading in the Content Areas	4
Ed./Sp. Ed. 470 Observation and Directed Teaching	8		
Ed. 410 History and Philosophy of Education	4		
Appropriate methods seminar(s)	4		
No Other Courses Permitted			

A student interested in pursuing a course of study leading to certification should contact a faculty member in the Department of Education early in the freshman year. A *Guide to Teacher Education*, available in the Education Department Office, gives a full description of all programs.

Each student is responsible for planning a program to meet the specific requirements for certification. The program should be planned in consultation with the Education Department.

Elementary Education

Students preparing to teach in elementary schools will follow the sequence of required courses listed, in addition to the Professional Education courses listed. Required courses cannot be taken Credit-No Credit.

Elementary Education Methods

Courses: Ed. 345 Methods and Content in Elementary and Middle Childhood I: Mathematics (4 hours) (Fall Semester, Junior year), Ed. 346 Methods and Content in Elementary and Middle Childhood II: Language Arts (4 hours) (Spring Semester, Junior year), Ed. 447 Methods and Content in Elementary and Middle Childhood III: Science (2 hours) (Professional Block), Ed. 448 Methods and Content in Elementary and Middle Childhood IV: Social Studies (2 hours) (Professional Block), FAA 340 Art Activities in the Elementary School, FAA 481 Methods and Materials in Teaching Elementary School Music, PE 481 Elementary School Physical Education.

Related required courses include: Math 225-226 Mathematics for Elementary Teachers (4 hours), FAA 103 Music as an Art and Science I (2 hours), PE 227 Personal and Community Health (4 hours), GS 202 Physical and Cultural Geography (4 hours), Hist. 201 United States History (4 hours), Hist. 202 United States History (4 hours), Hist. 225 West Virginia History, Government and Geography (2 hours), Econ. 200 Principles of Economics (4 hours), Science: select 6 hours, 2 of which must be Biology, from approved list.

A teaching specialization may be added to the Elementary Education program for Specific Learning Disabilities. Interested students must contact the Director of Teacher Preparation Programs.



Middle Childhood Education

Students preparing to teach in middle childhood settings (Middle School and Junior High Schools) will follow the Professional Education Sequence listed. They must choose two teaching fields from: Mathematics, Language Arts, Social Studies, General Science, French, German, Spanish, and Basic Skills.

Students preparing to teach at the middle childhood level should discuss their program with the Head of the Education Department. Two teaching fields are required for a degree in education and certification in West Virginia. Middle Childhood certification may be added to elementary or secondary certification with the advisement and permission of the Education Department. A *Guide to Teacher Education* gives a full description of all programs leading to certification in West Virginia. The *Guide* is available in the Education Department.

Each student is responsible for planning a program for meeting certification requirements.



Secondary Education

Students preparing to teach in secondary schools are expected to follow the sequence of required education courses listed in the Professional Education sequence. General distribution and other requirements for graduation, and the student's field of concentration, must be added. The required education courses cannot be taken Credit-No Credit.

Students preparing to teach at the secondary level should discuss their program with the Head of the Education Department, as well as the person responsible for the Teacher Education Program in the major field. A second teaching field is required in most areas. A *Guide to Teacher Education* gives the full description of all programs leading to certification in West Virginia. The *Guide* is available in the Education Department.

Teaching fields include: Biology, Chemistry, Physics, General Science, French, German, Spanish, English, Physical Education, Social Studies.

Education (Non-School Settings)

The Education Department provides for a field of concentration, without public school certification, to allow students to prepare for a variety of roles in non-school settings, such as: 1) training program development and implementation in business and industry, 2) policy planning roles in state and federal agencies, and 3) higher education instruction in foundation areas.

Courses required are: Education 201, 202, 242, 302, 333, 349, 401, 475, 476, and 490.

In addition, each student will propose a program of study in one of the following areas of specialization: Human Resources Management and Training, Education Policy Planning, Educational Foundations, or other identified pre-professional areas of study within the discipline. Courses will be determined through the development of a program proposal based upon the student's career and study goals.

Admission to Teacher Education

Students interested in preparing to teach are urged to consult a member of the Education Department individually as soon as possible for counseling with respect to prospects for employment in various teaching fields, course requirements, and state certification requirements.

During the second semester of the sophomore year, written application for admission to the elementary, middle childhood or secondary teacher education program should be submitted to the Education Department on forms obtained from the department. Students applying for elementary education must have been enrolled in Education 201, 202, 242. Students applying for middle childhood education must have been enrolled in Education 201, 202, 242. Students applying for secondary education must have been enrolled in Education 202 and 242.

Applications are appraised by the Education Department with respect to academic achievement, emotional and physical fitness, personality traits, and other factors the committee considers essential to a teaching career. The department may: (1) recommend full or conditional approval; (2) suggest programs to overcome certain deficiencies, or, in some cases; (3) recommend that the student not prepare for teaching. A complete description of the procedures may be found in the *Guide*.

A "C" average must be attained in all academic work and in all professional education courses for admission. All recommendations for approval are based on this condition. A student's qualifications may be reviewed at any time. The general qualifications of all students are reviewed at the time they apply for student teaching. Forms, procedures and dates may be found in the *Guide*.

Professional Block

Each student in teacher education takes a designated group of professional courses, including student teaching, during the *first* semester of the senior year. This is known as the Professional Block. Requirements for admission to the block are as follows:

Prerequisites – Admission to teacher education and for Elementary Education: Psychology 100 and Education 201, 202, 242, 345, 346, and 348; for Middle Childhood Psychology 100 and Education 201, 202, 242, 347, and applied methods as appropriate; and for Secondary Education: Psychology 100 and Education 202, 242 and 349, and adequate background for student teaching in one or more subject fields as approved by the academic department(s) concerned. Prerequisites cannot be deferred until after the Professional Block or taken at another institution without *written* permission from the Education Department.

Scholarship Requirements — By West Virginia state law, a student in Elementary Education must have not less than a "C" average in all college work and a "C" average in professional (education) courses taken prior to the time he or she is admitted to the block; a student in Middle Childhood or Secondary Education must have not less than a "C" average in all college

work, a "C" average in his or her field(s) or specialization, and a "C" average in professional (education) courses, including methods courses offered by other departments, taken prior to the block.

Application for Student Teaching — Students are required to make application for student teaching during the second semester of the junior year, on forms provided by the Education Department. This application requests the recommendation of the students' senior Education Department advisor, if Elementary or Middle Childhood, or the academic department head or advisor if secondary, and requires the approval of the head of the Education Department. Applications cannot be approved for students not previously admitted to Teacher Education. Forms, procedures and dates may be found in the *Guide*.

Competency-Based Professional Block — Student teaching is conducted for the entire first semester of the senior year in area schools or off-campus centers. Related course work is integrated with student teaching to provide direct application to field experience. Students assigned to off-campus centers may need to live in the community where the center is located. The College will assist in locating housing if desired, and with other details of the arrangement.

Students are not permitted to schedule courses in conflict with the block during the semester they are enrolled in it, or carry extra-curricular activities which interfere with the requirements imposed by the block. Arrangements can usually be made for practice and participation in varsity sports. Any exceptions to the above must be approved by the head of the department concerned and by the Dean of the Faculty. Students should *not* register for other than the prescribed Professional Block courses without written permission from the Education Department.

Bilingual-Bicultural Teacher Education — Bethany College, through the combined efforts of the Education Department and the Foreign Language Department, offers preparation for those students who might wish to teach young people whose first language is Spanish. While West Virginia does not offer certification in this area, many states do and a student completing the Bilingual-Bicultural sequence of courses would meet the requirements of most states. Students interested in this program should contact the Head of the Education Department and the Head of the Foreign Language Department for details regarding the program.

Psychology/Education Interdisciplinary Program — The Education Department and the Psychology Department offer an Interdisciplinary Degree for students interested in preparing for school and child related careers. Information concerning this program can be obtained from the Education Department or the Psychology Department.

Certification

Near the end of the senior year, each student should initiate application procedures for certification in the state where he or she expects to teach.

Applications require the recommendation of the head of the Education Department. To be recommended, a student must meet — in addition to certification requirements of the state for which he or she is applying — the following qualifications: (1) successful student teaching experience; (2) completion of an approved teacher education program; (3) completion of the undergraduate or graduate program examinations (including both the field and education tests for secondary) during the senior year, as arranged by the Education Department; (4) eligibility for graduation; and (5) evidence of personal traits and character conducive to success as a teacher.

Education 100 Developmental Studies: Reading 2 hours

Designed to provide basic instruction in readings and comprehensive skills for first semester freshmen. Emphasis will be placed upon the students growth in the specific areas of word recognition, vocabulary, comprehension and study skills. (*Offered only as credit/non credit*)

Education 105 Developmental Studies: Mathematics 2 hours

Designed to provide developmental mathematics instruction for the college student who wishes to improve his/her abilities in mathematics. Emphasis will be placed upon conceptual understanding of basic mathematics with corresponding computational skill development. (*Offered only as credit/noncredit. Does not fulfill Quantitative Reasoning perspective requirement*)

Ed. 201 Human Development I 4 hours
Individual and group development from infancy to adolescence. Observation and first-hand contacts with children are included. Educational programs are considered in terms of the total child development. *Freshmen not admitted. (May be taken for credit as S.W. 201.)*

Ed. 202 Human Development II 4 hours
Individual and group development from adolescence through senescence. Applications are made in relation to learning theory, self-understanding, and preparation for working with young people. *Freshmen not admitted. (May be taken for credit as S.W. 202.)*

Ed. 242 Principles and Curriculum of the Public School 2 hours
Introductory course in which students explore the goals of education and their implementation; the role of the teacher and professional concerns while applying the concepts of human development.

Ed. 275 Student Development in Higher Education
Study of the philosophy of higher education and the development of the individual student within the college environment. Emphasis is placed upon personal growth, communication skills, group dynamics, and residence hall programming. Didactic and experiential learning in the areas of personal, academic, and vocational counseling is included. (May be taken for credit as Psychology 275.) *Enrollment limited to Resident Advisors.*

Ed. 289 Children's Literature 2 hours
Includes background of the history of literature for children; familiarity with established and current literature in this area; critical analysis skills; methods and techniques of using literature; work with children. *(May be taken for credit as Eng. 289.)*

Ed. 290 Literature and Adolescence 2 hours
(See English 290.)

Ed. 300-309 Issues in Education
Courses focusing on special topics in Education for majors and non-majors.

Ed. 300 Juveniles, Law and School 4 hours
A review of the social and legal status of juveniles to 1899, through the Warren Court and today. Law libraries, Supreme Court decisions, juvenile authorities, detention centers, school and college authorities will provide applications for the basic concept of justice as it applies to juveniles in this country.

Ed. 301 Educational Ethnography: Field Based Research in the Schools 4 hours
This course will investigate the process of constructing, through direct observation, a theory of the working of a particular culture (i.e., schools). Students will study the theoretical base, rationale and methodology used in collecting and analyzing data by means of an ethnographic approach.

Ed. 302 School and Society 4 hours
A study of the role of schools in a society, of the school as a formal and informal organization, and of the function of schooling. The course will utilize the methodologies of the disciplines of education, sociology, and other social sciences. Case studies and on-site observations combine with a variety of readings to provide a wide range of viewpoints for students to evaluate. *(See Sociology 302)*

Ed. 311 Instructional Theory and Applications 2 hours
Studying and practicing the use of a wide variety of teaching strategies appropriate for adult learners; preparation for implementation in a variety of settings and with a variety of subjects.

Ed. 312 Curriculum Development 2 hours
Study of the methods of curriculum development and implementation. Practice with the appropriate subject matter. Practice in evaluating curricular materials in a variety of media. Study of curriculum evaluation.

Ed. 340 Teaching Reading in the Content Areas 4 hours
This course will focus on diagnostic and prescriptive teaching techniques. Both the corrective techniques for the remedial reader and the higher order cognitive skills will be included. In addition to classwork this course includes two hours weekly of tutoring of middle school, secondary, or college students who have been recommended by their advisors for help in reading. (May be taken for credit as English 482.)

Ed. 344 Teaching Skills Laboratory Non-credit
Study and practice of specific teaching skills related to the technical and media areas of education. Students must complete the required work prior to student teaching. Information related to the course work is available from the Education Department office. Elementary and secondary.

Ed. 345 Methods and Content in Elementary and Middle Childhood I: Mathematics 4 hours
Practical application of arithmetical skills, including the understanding of fundamental processes; comparison of different philosophies in teaching arithmetic; the elements of modern math; and the theoretical and practical application of the metric system at all levels of the curriculum. Classroom experience in public schools. *Prerequisite: Math 225 or permission of the instructor.*

Ed. 346 Methods and Content in Elementary and Middle Childhood II: Language Arts 4 hours

Emphasis on teaching the skills of reading, listening, speaking, and writing as they relate to the total curriculum. Emphasis on teaching of reading and the integration of the related areas in language arts. Students are expected to demonstrate competence in appropriate audio-visual aids. Classroom experience in public schools.

Ed. 347 Professional Practicum: Middle Childhood 2 hours

Preparation of the prospective teacher for a professional role as observer and participant in the classroom at the elementary level.

Ed. 348 Professional Practicum: Elementary 2 hours

Preparation of the prospective teacher for a professional role as observer and participant in the classroom at the middle childhood level.

Ed. 349 Professional Practicum: Secondary 2 hours

Preparation of the prospective teacher for a professional role as observer and participant in the classroom at the secondary level.

Ed. 350 Reading: Diagnosis and Prescription 2 hours

This is a methods course which deals with reading disabilities within the content areas. Format will include diagnosis of specific problems and their origins as well as prescription for correction and remediation. Those enrolled in the course will participate in laboratory situations to tutor disabled readers. (To be taken following or concurrent with Ed. 340 or Ed. 346.)

Ed. 355 Mathematics: Diagnosis and Prescription 2 hours

This is a methods course which deals with corrective and remedial situations in mathematics. Format will include diagnosis of specific problems and their origins as well as prescription for correction and remediation. Those enrolled in the course will participate in laboratory situations to tutor students with problems in mathematics. (To be taken following or concurrent with Ed. 345.)

Ed. 401 History and Philosophy of Education 2 hours

Development of modern education in social, historical, and philosophical perspective, emphasizing backgrounds of present practices, current problems, and issues. Current practice is analyzed in terms of philosophic rationale and applications are made to the school situation.

Ed. 428 Principles and Techniques of Secondary Education 4 hours

Aims, functions, and curriculum organization of middle, junior high, and senior high schools. Basic strategies, materials, and techniques, including evaluation applicable to teaching, are integrated with a full semester of student teaching in schools. Certification and employment procedures, professional practices, and continuing education are also considered.

Ed. 447 Methods and Content in Elementary and Middle Childhood III: Science 2 hours

Understanding of the concepts of the sciences approached through various methods, including unit study, inquiry, experimentation, and the process approach. Practical application in school situation.

Ed. 448 Methods and Content in Elementary and Middle Childhood IV: Social Studies 2 hours

Understanding of the concepts of social studies approached through various methods, including unit study, inquiry experimentation, and the process approach. Practical application in school situations.

Ed. 470 Observation and Directed Teaching 4 or 8 hours

Directed full-semester or half-semester observation and student teaching in schools with partial assignments in appropriate grade levels; to include weekly student teaching seminars and a minimum of 150 clock hours actual teaching. Students must make applications for student teaching prior to advance registration. Other course or activities which might interfere with student teaching are not permitted. Concurrent with enrollment in the Education Block. (CR/NCR course.)

Education 475 Professional Internship 4 hours

Participation in an adult training and/or educational program appropriate to the student's area of study and potential employment. Students will apply the skills and knowledge gained in previous courses.

Education 476 Education in Non-School Settings 2 hours

A seminar in education for the potential teacher of adults. Focus on the process of training in settings other than in traditional school settings. To be taken concurrently with Education 475 Professional Internship.

Ed. 480 Methods and Materials in Teaching 2 or 4 hours

See courses numbered 480 offered by Biology, Chemistry, English, Foreign Languages, General Science, Mathematics, Physical Education, Physics, Psychology and Social Sciences.

Ed. 481 Methods of Teaching Basic Skills – Middle Childhood Education 2 hours

A guided syntheses of the specific content and methods related to the Basic Skills Program. An awareness of the various application of skills across interdisciplinary lines will be developed with recognition given to a student's individual and educational needs.

Ed. 482 Methods and Materials in Bilingual-Bicultural Education 2 hours
(See Foreign Language 482.)

Ed. 484 Methods of Teaching English as a Foreign Language 2 hours
(See English 484.)

Ed. 487-488 Independent Study 2 or 4 hours

Ed. 490 Senior Project 2-8 hours

Special Education

Sp. Ed. 205 Introduction to the Exceptional Learner 2 hours

This course is designed to serve as an integral part of the preparation of teachers of Specific Learning Disability students and others who are involved with exceptional students educationally. Recent social, legal, and educational trends related to the handicapped student will be discussed, as well as the characteristics and educational methods for various areas of exceptionalities.

Sp. Ed. 206 Educating the Specific Learning Disabilities Student 4 hours

This course is designed to introduce the characteristics of the Specific Learning Disability (SLD) student and models of intervention, mainstreaming, and roles of resource room, consulting room, and teachers of self-contained classrooms. A field placement is required for this course.

Sp. Ed. 320 Teaching Methods for Specific Learning Disabilities: Early and Middle Childhood 2 hours

This course is designed to instruct specific learning disability (SLD) teachers in methods and models of intervention and synthesis of the diagnostic-prescriptive model. This is a SLD methods course for early and middle childhood that stresses intervention strategies for different levels of severity.

Sp. Ed. 410 Tests and Measurements 2 hours

This course is designed to provide teachers with knowledge of and experience with a variety of assessment instruments for the purpose of educational evaluation placement, diagnosis, and intervention. Students will administer formal tests and develop informal tests as a means of acquiring skills with standardized, norm-referenced, criteria-referenced, diagnostic, and achievement tests to provide appropriate educational programs for the learning disabled student. (*May be taken for credit as Psychology 410.*)

Sp. Ed. 470 Observation and Directed Teaching: Specific Learning Disabilities 4 hours

Directed half-semester observation and student teaching in schools with partial assignments in appropriate specific learning disabilities placements, to include weekly student teaching seminars and a minimum of 150 clock hours actual teaching. Students must make application for student teaching prior to advance registration. Other course or activities which might interfere with student teaching are not permitted. Concurrent with enrollment in the Education Block and Education 470 (4 hours credit). Credit-No Credit.



English

Aims

To help students to develop and maintain the ability to write clear and effective English; to guide them toward an increased understanding and critical appreciation of their literary heritage; to help prepare them for graduate and professional study. In addition, the department provides programs that prepare students for certification as teachers of English and Language Arts.

Requirements for Field of Concentration

1. Concentration in English requires a minimum of 32 hours in the department, exclusive of the Senior Project. The following courses are required: 140 or 150, 4 hours from Eng. 265, 266, 268, 325-326, 330, 341-342, 477. Students should also elect at least one Seminar in

British Literature (courses numbered 420-429), and at least one Seminar in American Literature (courses numbered 450-459). These seminars, together with other advanced courses or independent study, will extend the student's knowledge of one or two areas of literature, provide background for the Senior Project, and help to prepare for future study or a career. Thus, the program of a student preparing for the law or another profession will be different from that of a student preparing for graduate study in English or for secondary school teaching.

2. At least 12 hours in another department should be included in the field of concentration. These courses may be related to the student's special interests or vocational plans.

3. Students planning to attend graduate or professional schools should prepare to meet foreign language reading requirements.

4. Students are not accepted for concentration in English later than the beginning of their fifth semester unless they have completed English 140 (or 150) and either English 325-326 or English 341-342.

5. Students concentrating in English are expected to attain a minimum grade of C in all courses in the department.

6. Only students who have completed the following courses or their equivalents will be recommended for certification to teach English in secondary school: Eng. 140, 210, 325-326, 341-342, 370, 375; Comm. 335, FAA 220, Eng. 290 or Ed. 290, Eng. 480 or Ed. 480; two courses from Eng. 100-109, 125, 150, 213, 217, 490, or FAA 217; two courses from Eng. 261, 262, 263, 264, 330, 350, 420-429, 440-449, 450-459, 477, or 270; one course from Eng. 265, 266, 268. A second teaching field also is required. Students interested in teaching should consult the Education Department listings for required courses in Professional Education.

Writing Proficiency Program

The Writing Proficiency Program is administered by the English Department. Students should complete the program and meet the writing proficiency requirement for graduation before the beginning of the senior year.

Students must achieve and maintain an above-average level of proficiency in expository writing by taking the annual Writing Qualification Test or by satisfactory completion of selected writing courses offered by the English Department.

Students who choose to satisfy the requirement by enrolling in writing courses may do so by electing from the following: English 101-109, 120, 125, 140, 150, 205, 210, 213, or 351. No more than one course per academic year will apply to the requirement. See below for the number of courses needed to satisfy the writing proficiency requirement.

The Department of English will certify to the Registrar that a student has satisfied the writing proficiency requirement for graduation when proficiency has been demonstrated in one of the following ways:

1. By achieving a high level of proficiency on both the first Writing Qualification Test, taken in November of the freshman year, and the second Writing Qualification Test, taken in April of the sophomore year; or by achieving a grade of C+ or better in a writing course taken instead of either or both of these tests. *A student whose proficiency is certified in this way is not required to take additional tests or courses.*

2. By taking the first Writing Qualification Test in November of the freshman year and achieving a high level of proficiency on the third test, taken in April of the junior year.

*Students who have not met the writing proficiency requirement before the beginning of their seventh semester must enroll in English 120, a non-credit, non-graded course in expository writing. Special Writing Qualification Tests are given as part of this course, and students must continue in the course until they have achieved a high level of proficiency on one of the special tests. Special Writing Qualification Tests are given to seniors *only* when enrolled in the course.*

Special arrangements are made for students who transfer from other colleges. Transfer students should consult the Department of English immediately upon enrolling at Bethany.

Writing tests are given according to the following schedule:

November

Writing Qualification Test: Freshmen (Required)

February

Diagnostic Qualification Test: All students entering in February

April

Writing Qualification Test: Sophomores (Advisory) and Juniors (Required)

Eng. 101-109 College Composition

2 hours each

Training and practice in writing clear and effective expository prose. Emphasis is on the role of persona, point-of-view, audience, organization, and style in informal and formal writing in relation to specific subject matter. Instruction in methods of research and documentation is also included. (May not be taken on a credit/no credit basis.)

All courses in the 101-109 series are basic writing courses (neither remedial nor advanced). The courses share a common approach to the teaching of effective writing skills, but those writing skills are tested and honed against a variety of topics. Students may take more than one course for this series.

Eng. 101 Making Decisions 2 hours

Eng. 103 Science Technology and Natural World 2 hours

Eng. 106 Southern Fiction 2 hours

Eng. 107 Grammar and Writing 2 hours

Eng. 110-111 Dramatic Literature and Theatre Development 4 hours each (See FAA 110-111.)

Eng. 120 Expository Writing Non-credit
Training and practice in writing clear and effective expository prose with emphasis upon the needs of individual students. *Required of all students whose performance on the third (Junior) Writing Qualification Test is not satisfactory.*

Eng. 125 Expository Writing Workshop 2 hours
Training and practice in writing clear and effective expository prose. After an initial diagnosis, an individual program is designed for each student. Offered as a substitute for English 101-109 and an alternative to English 120. (May not be taken on a credit-no credit basis.)

Eng. 140 Introduction to Literature 4 hours
Introduction to the study of poetry, drama, and fiction. Emphasis is on the development of techniques for the analysis and evaluation of poetry, drama, and fiction and on the writing of literary essays. *Open to all students. Required for concentration in English.*

Eng. 150 Honors Freshman English 4 hours

A course for freshmen of superior ability and accomplishment. Introduction to the principles of critical reading and writing and to the analysis and evaluation of poetry, drama, and fiction. Intensive practice in expository and imaginative writing with emphasis upon the achievement of clarity and accuracy. *May be substituted for Eng. 140 to fulfill requirement for concentration in English and prerequisites for English courses. Enrollment by invitation only.*

Eng. 160 Introduction to Film 4 hours
In this course, students will study the film as a technical artifact, an art object, a mirror of society, and a moral statement. They will see twelve classic films such as Chaplin's *City Lights*, Resnais's *Hiroshima Mon Amour*, Bergman's *Virgin Spring*, and Hitchcock's *Psycho*. *Fee: \$15.*

Eng. 205 Writing for Business and Industry 2 hours
Writing formal and informal reports, summaries, business letters, job descriptions, applications and resumes. Each student will complete approximately 10 writing assignments. *Prerequisite: English 101-109 or demonstrated competence in expository writing.*

Eng. 210 Creative Writing 2 hours
Training and practice in the creative aspects of expository and imaginative writing. Students write essays, sketches, short fiction, poems, and dramatic scenes. *Prerequisite: English 101-109 or its equivalent. Required for students preparing to teach secondary school English. Enrollment limited to 15 students with preference given to Juniors and Seniors.*

Eng. 213 Advanced Expository Writing 2 hours
Intensive practice in writing expository prose with emphasis upon the achievement of literary excellence. Enrollment limited to 15 students with preference given to juniors and seniors. *Prerequisite: English 101-109 or the equivalent.*

Eng. 217 Imaginative Writing 2 hours
Intensive practice in writing fiction, poetry, or plays with emphasis upon the achievement of literary excellence. Individual assignments and frequent conferences. *Enrollment limited to 12 students with preference given to Juniors and Seniors. Prerequisites: Eng. 140 or 210 and permission of the instructor. (May be taken for credit as FAA 217.)*



Eng. 261-262 British Novel 2 hours each
Development of the British novel from the 18th century to the present. 261: Defoe through Dickens. 262: Hardy to the present.

Eng. 263-264 American Novel 2 hours each
Development of the American novel from the 19th century to the present. 263: Beginnings through World War I. 264: 1920s to the present.

Eng. 265 Classical Western Literature 2 hours
A study of the writings of the major authors in Ancient Greece and Rome. Emphasis is on the work of Homer, Virgil, Ovid, and the Greek dramatists.

Eng. 266 Masterpieces of Western Literature 2 hours
A study of major works from the Middle Ages through the nineteenth century. Such works as the following will be considered: Dante's *Divine Comedy*, Rabelais' *Gargantua and Pantagruel*, Cervantes' *Don Quixote*, Swift's *Gulliver's Travels*, Goethe's *Faust*, and Tolstoy's *Anna Karenina*.

Eng. 268 Modern World Literature 4 hours
A study of the work of writers representing the diverse cultural traditions of the modern world. In addition to the works representing the western tradition, works will be studied representing such traditions as the Eastern European, the middle Eastern, the African, the Latin American and the Oriental.

Eng. 270 Shakespeare 4 hours
Rapid reading of the major plays with emphasis upon Shakespeare's themes, motifs, language and characterization. (May be taken for credit as FAA 270.)

Eng. 280-289 Colloquium in Literature 2 or 4 hours each
Courses for the discussion of special topics in literature. *Enrollment in each course limited to 20 students.*

Eng. 289 Children's Literature 2 hours
(See Ed. 289.)

Eng. 290 Literature and Adolescence 2 hours
Study of important works about or of special interest to young people of junior high school through high school age. Techniques of presenting the works are considered. Readings are primarily in short stories and novels. Required for students preparing to teach secondary school English. (May be taken for credit as Ed. 290.)

Eng. 325-326 British Literature 4 hours each
Development of British literature from the beginning through the Victorian Period. First semester: from *Beowulf* through Milton. Second semester: from the Restoration to the end of the 19th century. *Prerequisite: Eng. 140 or permission of the instructor. Required for concentration in English.*

Eng. 330 Twentieth Century British Literature 2 hours
Study of important works of British literature during this century. Writers to be included: Eliot, Yeats, Auden, Woolf, Joyce, and Pinter. *Prerequisite: Eng. 140. Required for concentration in English.*

Eng. 341-342 American Literature 4 hours each
Development of American literature from the Colonial Period to the present with emphasis upon the writers of the 19th and 20th centuries. *Prerequisite: Eng. 140 or permission of the instructor.*

Eng. 351 Literary Criticism 4 hours
Study of the history of literary criticism, literary theory, and applied approaches to literary criticism. Special emphasis will be placed on the preparation of essays which apply various theories and demonstrate various critical points of view.

Eng. 370 Development of Modern English 4 hours
History of the English language from Anglo-Saxon to modern English with emphasis upon the structure and vocabulary of the latter. *Not open to Freshmen. Required for students preparing to teach secondary school English.*

Eng. 375 English Grammar 2 hours
The description and analysis of the grammar of the English language. Various grammatical systems are considered, such as the traditional, the structural, and the transformational-generative. *Required for students preparing to teach secondary school English.*

Eng. 420-429 Seminar in Major Authors 2 or 4 hours each
Advanced study of one or more major British, American, or European authors. *Prerequisite: previous study of the author or authors in a survey course. Enrollment in each course limited to 12 students.*

Eng. 421 Hemingway 2 hours
Study of selected fiction by Ernest Hemingway. Emphasis will be on the Nick Adams stories, "A Farewell to Arms" and "The Old Man and the Sea."

Eng. 423 Johnson and Boswell 4 hours
Study of the life and selected works of Samuel Johnson and of James Boswell as journalist and biographer.

Eng. 440-449 Seminar in British Literature 2 or 4 hours each
Advanced study of a period, movement, or tradition in British literature. *Prerequisite: previous study of the period, movement, or tradition in a survey course. Enrollment in each course limited to 12 students.*

Eng. 443 The Heroic Tradition in British Narrative 4 hours
Study of the development of the heroic tradition from the Greek epics through medieval and Renaissance epics and romances to modern novels. Students will read *Iliad*, *Beowulf*, selected Arthurian works, *Paradise Lost*, and Tolkien's *Lord of the Rings*.

Eng. 444 Age of Johnson 4 hours
Study of the major prose, poetry, and drama of the mid-eighteenth century with emphasis upon the work of Samuel Johnson and the members of his circle, including Boswell, Goldsmith, and others.

Eng. 450-459 Seminar in American Literature 2 or 4 hours each
Advanced study of a period, movement, or tradition in American literature. *Prerequisite: previous study of the period, movement, or tradition in a survey course. Enrollment in each course limited to 12 students.*

Eng. 450 Recent American Literature 4 hours
A study of American poetry, drama and fiction since World War II. Emphasis is on the analysis of works representing the various ideas, techniques, styles and movements characterizing the writing of the last forty years.

Eng. 456 The 1920's 4 hours
A study of the poetry, drama, fiction, and critical writings of the 1920's. Emphasis is on such major writers as Pound, Eliot, Fitzgerald, Hemingway, Faulkner, and O'Neill, but other important writers will also be studied.

Eng. 457 Hawthorne, James, and Faulkner 4 hours
A study of critical and fictional works of Hawthorne, James, and Faulkner. Emphasis is on ideas, themes, and techniques.

Eng. 477 English Seminar 2 hours
Reading and research designed to help students review and organize their knowledge of literature. *Prerequisites: English 140 or 150, 325-326, 330, 341-342 or permission of the instructor.*

Eng. 480 Methods of Teaching English 2 hours
Teaching of high school composition and literature. Literary analysis, systems of grammar, and reading improvement. (May be taken for credit as Education 480.)

Eng. 482 Teaching Reading in the Middle and Secondary School 2 hours
(See Education 340.)

Eng. 483 Theory and Practice of Teaching Composition 2 hours
An examination of historical and current theories of composition as a conceptual background for both teaching and writing. Students will study research and theory on the writing process. Students will practice both writing and teaching writing.

Eng. 484 Methods of Teaching English as a Foreign Language 2 hours
Directed study of techniques for teaching English vocabulary, spelling, and grammar to native speakers of other languages. Practical experience through tutoring. (May be taken for credit as Education 484.) *Offered upon request.*

Eng. 487-488 Independent Study 2 or 4 hours each
Individual study in any area of English for which the student is qualified. Independent study is offered only in areas not included in other courses in the department. *Prerequisites: Adequate preparation to undertake the study as determined by the instructor; permission of the head of the department.*

Eng. 490 Senior Project 2-8 hours
Generally consists of a major critical paper on a topic developed from at least one of the student's elective courses in the department. During the junior year, the student should determine an area of interest and make a preliminary investigation of it after consulting with his or her mentor (the faculty member best qualified to assist in the project). Reading and research should continue during the student's senior year, and much of the final semester should be devoted to preparation of the paper. Sometimes, the project may take other forms. Students wishing to undertake an unusual project must consult with the head of the department no later than the beginning of the fourth semester. Credit for the senior project is not included in the total number of hours required for concentration in English.



Fine and Applied Arts

Aims

The Fine and Applied Arts Department provides study in the visual arts, music, theatre, and communication design. The purpose of the department is to give expression to the aesthetic unity of the various forms and modes of the arts and, at the same time, to permit students to pursue practice in the arts for both personal satisfaction and professional preparation. Emphases include 1) the cultural foundations and

traditions of the arts, including studio and performance areas, 2) graphics and communication design, and 3) the professional aspects of arts management, including internship opportunities.

Requirements for Field of Concentration

Students concentrating in Fine and Applied Arts will take Fine and Applied Arts 101-102 and 110-111. In addition, the concentration requires completion of one of the following departmental emphases: 1) Two-Dimensional Art: 16 hours; 2) Three-Dimensional Art: 20 hours; 3) Graphics and Communication Design: 22 hours; or 4) Theatre: 22 hours. Also each student must complete FAA 477 and a Senior Project. Students interested in the field of Arts Management should complete one of the emphases above, the Professional Core Program in Management, and the course in Fine and Applied Arts 399. For advice about specific course requirements in an area of emphasis, see the Head of the Department.

Foundation Courses

FAA 101-102 Introduction to the Arts

4 hours each

Historical and aesthetic study of the visual arts and music from the ancient world to the present. Representative master works of art are considered, and consideration is given to aesthetic functions and values.

FAA 110-111 Dramatic Literature and Theatre Development

4 hours each

A survey of drama and theatre architecture and design with emphasis on both primary and secondary literature in both historical and aesthetic context.

FAA 203 Interpersonal Communication: Public Speaking

4 hours

(See Communications 206.)

FAA 307 Interpersonal Communication: Oral Interpretation

4 hours

(See Communications 307.)

FAA 340 Art Activities in the Elementary Schools

4 hours

Study of the theories and goals of art education in the elementary school with emphasis on the child's growth and development through art. Exploration of art techniques is included.

FAA 399 Fine Arts Management

2 hours

The study of management principles and practices as applied to agencies and institutions in the various fields of the arts, such as museums, galleries, symphonies, theatres, and others.

FAA 477 Senior Seminar

2 hours

Review of the fine arts area concentrating upon the student's field of emphasis, largely in preparation for the senior comprehensive examination. Required of all seniors in the fine arts field.

FAA 481 Methods and Materials in Teaching Elementary School Music

2 hours

The aims and values of elementary school music will be studied, opportunities to develop teaching techniques will be provided, and introductions to standard materials will be made. Required of all elementary education majors.

FAA 487-488 Independent Study

2-4 hours

FAA 490 Senior Project

2-4 hours

Begins during the second semester of the junior year.

Two-Dimensional Art

FAA 200 Introduction to Two-Dimensional Design 4 hours

Basic course work in the theories and practice of two-dimensional design; study of the elements and materials in relation to design potentials with practical applications. *Prerequisite for those emphasizing art.*

FAA 205 Still-Life and Landscape 2 hours

Concentrated activity in drawing using a variety of drawing media. Primary emphasis is placed on still life and landscape.

FAA 206 Figure and Portraiture Drawing 2 hours

Concentrated activity in drawing using a variety of drawing media. Primary emphasis is placed on figure drawing and portraiture.

FAA 300 Watercolor Painting 2 hours

Creative exploration of the techniques of watercolor and acrylics, using still life, landscape, portraiture, and imaginative subject matter in a variety of styles.

FAA 301 Oil Painting 2 hours

Creative exploration of the techniques of oil paints and compatible media, using still life, landscape, portraiture, and imaginative subject matter in a variety of styles.

FAA 305 Advanced Still-Life and Landscape Drawing 2 hours

Advanced problems in drawing with a concentration in a specific area, including still life, landscape, and imaginary drawing. Emphasis on composition. *Prerequisite: FAA 205.*

FAA 306 Advanced Figure and Portraiture Drawing 2 hours

Advanced problems in drawing with a concentration in a specific area, including figure drawing and portraiture. *Prerequisite: FAA 206.*

Three-Dimensional Art

FAA 201 Introduction to Three-Dimensional Design 4 hours

Basic course work in the theories and practice of three-dimensional design; study of the elements and materials in relation to design potentials with practical applications. *Prerequisite for those emphasizing three-dimensional art.*

FAA 210 Ceramics I 2 hours

Studio experience in forming, firing, and glazing pottery, including ceramic sculpture. Individual projects according to student's ability.

FAA 310 Ceramics II 2 hours

Advanced problems in media and subject matter selected by the student with the advice of the instructor. *Prerequisite: FAA 210.*

FAA 320 Sculpture I 2 hours

Creative expression in three-dimensional forms. Students work with materials that are readily available and easily handled such as wood, wire, plaster, and clay. *Prerequisite: FAA 201 or permission of the instructor.*

FAA 420 Sculpture II 2 hours

Advanced problems in media and subject matter selected by the student with the advice of the instructor. *Prerequisite: FAA 320.*

FAA 425 Printmaking 4 hours

The study of printmaking processes emphasizing creative expression through such techniques as relief, intaglio, planographic, and serigraphy. *Prerequisite: FAA 205 or permission of the instructor.*

Graphics and Communication Design

FAA 302 Airbrush Techniques 2 hours

Beginning through advanced airbrush techniques. Exploration of various hues – graphic design, photo retouching, ceramics and painting.

FAA 303 Lettering and Layout 4 hours

Introduction to calligraphy, typography, letter forms, and layout, with emphasis on design, legibility, and creative practice.

FAA 304 Design Applications 4 hours

Emphasis on problem solving experiences as related to visual communications. The mechanics and psychology of two-dimensional and three-dimensional design are explored as a foundation for graphic design.

FAA 404 Television Graphics 4 hours

Emphasis on the design of visual symbols for television. Combines principles of graphic art with the particular requirements of television production. FAA 303 and 304 recommended but not required.

FAA 405 Graphic Communication Design 4 hours

The study of professional procedures, structures, communication functions and processes as applied to areas of graphic design. *Prerequisite: FAA 304.*

FAA 406 Computer Graphics and Applied Design 4 hours

Practical applications of graphics and communication design techniques as related to the computer and other technological aids. *Prerequisite: FAA 405.*

Music

FAA 103 Music as Art and Science 2 hours

This course provides an aural study of classical and popular music within an aesthetic perspective. It surveys various musicians within various genres and does not presuppose any previous musical background.

FAA 125-126 Concert Choir 1 hour each
Preparation for performance of madrigal and other smaller group choral music for advanced voices. Membership limited. Enrollment by audition.

FAA 131-132 Wind Ensemble 1 hour each
Study and preparation for performance of music for wind instruments from the 17th through 20th centuries. Enrollment by audition.

FAA 135-136 Chamber Ensemble

1 hour each

Study and preparation for performance of the standard chamber literature; quartets, trios, and other works according to the instrumentalists available. Enrollment by audition.

FAA 137-138 Jazz Band 1 hour each

Study and preparation for performance of arrangements for large jazz band. Designed to develop an appreciation for the musical styles of Glenn Miller, Woody Herman, Stan Kenton, and others. Enrollment by audition.

FAA 161-162 Harpsichord 1 hour each

Private instruction in the techniques, literature and history of the harpsichord. Enrollment by permission of the instructor.

FAA 163-164 Pipe Organ 1 hour each

Private instruction in the techniques, theory and literature of the pipe organ.

Prerequisites: proficiency on the piano equivalent to the Bach Inventions, early sonatas of Beethoven, Haydn or Mozart.

Enrollment by permission of the instructor.

FAA 165-166 Piano 1 hour each

Private instruction in the techniques, theory and literature of the piano. Enrollment by the permission of the instructor.

FAA 167-168 Strings 1 hour each

Private instruction in the techniques, theory and literature of violin, viola, cello or bass. Enrollment by permission of the instructor.

FAA 169-170 Classical Guitar

1 hour each

Private instruction in the techniques, theory and literature of classical guitar. Enrollment by permission of the instructor.

FAA 171-172 Winds 1 hour each

Private instruction in the techniques, theory and literature of the brass and woodwind instruments. Enrollment by permission of the instructor.

FAA 173-174 Voice 1 hour each

Private instruction in the technique, theory and literature of voice. Open to all students who have adequate native ability. Enrollment by permission of the instructor.

**Theatre****FAA 151 Fundamentals of Stage**

Construction 2 hours

FAA 152 Theatre Lighting 2 hours**FAA 153 Theatre Make-Up** 2 hours**FAA 154 Costuming** 2 hours**FAA 215 Dance for Non-Dancers** 2 hours

The development of beginning dancing skills with emphasis upon improvisational dance modes and creative body language.

FAA 217 Imaginative Writing 2 hours

(See English 217.)

FAA 220 Beginning Acting 2 hours

Movement, various styles, improvisations, projections of character, and speech technique. The course includes a 10-20 minute planned and rehearsed program that demonstrates skills acquired in improvisation and body and voice techniques.

FAA 222 Advanced Acting 2 hours

Scene study as a unit of theatrical form. Scenes from various periods to be directed and performed. Focus on interaction between characters.

FAA 230 Children's Theatre 2 hours

The development of techniques required for performing before children. Focus is upon the preparation of a complete children's theatre project to be presented before groups of young people.

FAA 232 Musical Comedy 2 hours

Study of musical comedy scores and libretti, basic principles of musical comedy singing, dancing, and acting, and other fundamentals of the genre.

FAA 270 Shakespeare 4 hours

(See English 270.)

FAA 330 Directing 2 hours

Fundamentals of staging, blocking, movement, stage business, tempo, script analyses, casting, and rehearsal planning. The course includes preparation of a prompt book for a one-act play to be directed for public performance.

Prerequisite: FAA 220.

FAA 416 The Lyric Stage 2 hours

This course is designed to introduce the general student to operatic techniques and conventions. The principle emphasis will be on the ways in which music enhances dramatic elements in operas of Mozart and Verdi. No technical knowledge of music is required.

Foreign Language

Aims

To familiarize students with the language and literature of the French, German, and Spanish speaking peoples; to help students understand a culture other than their own; and to assist students in preparing for careers requiring foreign language skills. The program also provides students interested in research with a reading knowledge of a foreign language, and it helps travelers to foreign countries acquire basic conversation skills.

Requirements for Field of Concentration in French, German, or Spanish

A minimum of 24 hours in the target language (not including French 101-102, German 101-102, or Spanish 101-102) plus Foreign Language 425, and a Senior Project.

A working knowledge of a foreign language other than the one chosen as the field of concentration is recommended. Every student is required to spend a minimum of one semester studying in a country where his or her major foreign language is spoken. Students expecting to teach a foreign language must complete Foreign Language 480 and the appropriate civilization and survey of literature courses.

Foreign Language majors should consider a strong second field in an area related to career goals.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach French, German or Spanish in secondary school. French – major: Fr. 101, 102, 200, either 300 or 301, 313, either 351 or 352, F.L. 425, 480 and any other four hours in French. Second field: Fr. 101, 102, 200, either 300 or 301, either 351 or 352, F.L. 480 and any other four hours of French. German – major: Ger. 101, 102, 200, either 300 or 301, 312, 351 or 352. F.L. 425, 480 and any other four hours in German. Second field: Ger. 101, 102, 200, either 300 or 301, 351 or 352. F.L. 480 and any other four hours of German. Spanish – major: Sp. 101, 102, 200, either 300 or 301, 351 or 352, 310 or 311, F.L. 425, 480 and any other six hours of Spanish. Second field: Sp. 101, 102, 200, either 300 or 301, 351 or 352, F.L. 480 and any other four hours in Spanish. See the Education Department listings for required Professional Education courses. A second teaching field is required.

French

Fr. 101 Basic French I 4 hours
Fundamentals of pronunciation, grammar, reading and composition. Emphasis on audio-oral approach to develop basic skills of comprehension and speaking. Introduction to French and Francophone cultures and issues. Four hours of oral practice in addition to four hours of classroom work per week. Intended primarily for students who have no acquaintance with the language.

Fr. 102 Basic French II 4 hours
Continuation of French 101. *Prerequisite: Fr. 101 or equivalent.*

Fr. 200 Intermediate French 4 hours
Grammar review, reading, speaking and writing. Study of French and Francophone cultures and introduction to the great works of literature. *Prerequisite: French 102 or equivalent.*

Fr. 300 Conversation and Composition: The Living Language 4 hours
French and American life styles are compared through discussions, skits, and compositions designed to improve the student's communication skills in French. Topics center around the school, home life, and interpersonal relationships. A feature of this course is participation in the weekly meeting of the French Club at the dinner hour. *Prerequisite: Fr. 200 or equivalent.*

Fr. 301 Conversation and Composition: Francophone World 4 hours
While improving skills of spoken and written communications in French, the student becomes acquainted with contemporary issues in the French-speaking world. A feature of this course is participation in the weekly meeting of the French Club at the dinner hour. *Prerequisite: Fr. 200 or equivalent.*

Fr. 313 France 4 hours
Introduction to France, with special attention to its political and cultural history, contemporary institutions, activities, customs and values. Cross-cultural comparisons and contrasts of France and the United States are included.

Fr. 351 Survey of French Literature I 4 hours
Survey of French literature from the earliest periods to the end of the 18th century. Readings in French from an anthology and certain reference works. Conducted in French. *Prerequisite: Fr. 200 or equivalent.*

Fr. 352 Survey of French Literature II 4 hours
Survey of French literature of the 19th and 20th centuries. Introduction to *explication de texte* techniques. Readings in French from an anthology and certain reference works. Conducted in French. *Prerequisite: Fr. 200 or equivalent.*

Fr. 400 Advanced French Grammar 2 hours
To facilitate correctness in writing and speaking, the grammatical structure of the French language is examined. *Prerequisite: Fr. 200 or equivalent.*

Literary Studies

Seminars highlighting major literary movements and genres from France's past and present.

Fr. 411 19th Century Novel 2 hours
French romanticism, realism, and naturalism are examined through the works of such novelists as Hugo, Stendhal, Flaubert, Balzac, and Zola. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 412 Contemporary Novel 2 hours
Study of the development of 20th century French fiction, from Proust and Gide to the New Novel. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 413 Philosophers of the French Enlightenment 2 hours
Examination of representative works by major 18th century French thinkers, including Montesquieu, Voltaire, Diderot, and Rousseau. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 414 French Existentialism in Literature 2 hours
Study of France's existentialists, including Sartre, Camus, and de Beauvoir. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*



Fr. 415 17th Century Classical Theatre 2 hours
Study of the great classical dramatists of France: Corneille, Moliere, and Racine. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 416 Poetry: From Romanticism to Surrealism 2 hours
Analysis of 19th and early 20th century French poetry, including the works of Lamartine, Hugo, Gautier, Baudelaire, Rimbaud, Apollinaire, Breton, and others. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 487-488 Independent Study
2 or 4 hours each

Fr. 490 Senior Project 2-8 hours

German

Ger. 101 Basic German 4 hours
Fundamentals of pronunciation, grammar, reading, and composition. Emphasis on audio-oral approach to develop basic skills of comprehension and speaking. German-speaking countries and their global relationships. Four hours of oral practice in addition to four hours of classroom work per week. Primarily for students who have no acquaintance with the language. *Prerequisite: German 101 or equivalent.*

Ger. 102 Basic German II 4 hours
Continuation of German 101. *Prerequisite: Ger. 101 or equivalent.*

Ger. 200 Intermediate German 4 hours
Grammar review, reading, speaking, writing. Emphasis on the variety of cultures and issues within German-speaking countries, including Third-World guest workers. *Prerequisite: German 102 or equivalent.*

Ger. 300 Conversation and Composition I 4 hours
Discussion of life in Germany. Designed to improve communication skills. Brief oral and written reports. A feature of this course is participation in the weekly meeting of the German Club at the dinner hour. *Prerequisite: Ger. 200 or equivalent.*

Ger. 301 Conversation and Composition II 4 hours
While improving skills of spoken and written communication in German, the student will discuss contemporary problems. A feature of this course is participation in the weekly meeting of the German Club at the dinner hour. *Prerequisite: Ger. 200 or equivalent.*

Ger. 302 German Business Correspondence 2 hours
Designed to prepare students for possible employment in German-American firms through the development of skills in business letter writing and familiarization with German technical terms in business and banking. *Prerequisite: Ger. 200 or equivalent.*

Ger. 306 Modern German Short Stories 2 hours
Selected stories by contemporary writers are read and discussed in German. *Prerequisite: Ger. 200 or equivalent.*

Ger. 308 Modern German Dramas 2 hours
Plays by modern authors, including Brecht and Dürrenmatt, are read and discussed in German. *Prerequisite: Ger. 200 or equivalent.*

Ger. 312 German Civilization 4 hours
Designed to acquaint the student with the history, culture, and people of the German speaking countries, the two Germanies, Switzerland and Austria.

Ger. 351 Survey of German Literature I 4 hours

Survey of German literature from the earliest periods to the beginning of the 19th century. Readings in German from an anthology. Conducted in German.

Prerequisite: German 200 or equivalent.

Ger. 352 Survey of German Literature II 4 hours

Survey of German Literature from the Romantic period to the present. Readings in German from an anthology. Conducted in German. *Prerequisite: German 200 or equivalent.*

Ger. 413 German Literature in the 20th Century 4 hours

Introduction to some of the chief authors, works, and literary movements of the 20th century. Readings (in German) include representative works by Mann, Kafka, Hesse, Grass, and Böll. *Prerequisite: A good reading knowledge of German. Ger. 351, 352 are recommended.*

Ger. 487-488 Independent Study 2 or 4 hours each

Ger. 490 Senior Project 2-8

Spanish

Span. 101 Basic Spanish 4 hours
Fundamentals of pronunciation, grammar, reading, and composition. Emphasis on audio-oral approach to develop basic skills of comprehension. Introduction to Spanish and Latin American cultures and issues. Four hours of oral practice in addition to four hours of classroom work. Intended primarily for students who have no acquaintance with the language.

Span. 102 Basic Spanish II 4 hours
Continuation of Spanish 101. *Prerequisite: Span. 101.*

Span. 200 Intermediate Spanish 4 hours
Grammar review, speaking, writing and study of the evolving Hispanic cultures in the contemporary world. *Prerequisite: Span. 101-102 or equivalent.*

Span. 300 Spanish Conversation and Composition: Spain 4 hours
Intensive training in spoken and written Spanish with emphasis on current events in Spain. Oral reports are based on readings from newspapers, magazines and literary works. A feature of this course is participation in the weekly meeting of the Spanish Club at the dinner hour. *Prerequisite: Span. 200 or equivalent.*

Span. 301 Spanish Conversation and Composition: Latin America 4 hours
Intensive training in spoken and written Spanish with emphasis on current events in Latin America. Oral reports are based on readings from newspapers, magazines and literary works. A feature of this course is participation in the weekly meeting of the Spanish Club at the dinner hour. *Prerequisite: Span. 200 or equivalent.*

Span. 302 International Spanish Correspondence 4 hours
Designed to prepare students of Spanish for possible employment in international government and commercial professions through the development of skills in business and diplomatic letter writing, familiarization with technical Spanish terms, instruction in methods of modern translation, and comprehensive preparation for bilingual positions.

Span. 310 Spanish American Civilization 2 hours
Development of Latin America from the pre-Columbian era to the present day in art, music, drama, history, and literature. Each student does research on a specific project selected in consultation with the instructor. Conducted in English.

Span. 311 Spanish Civilization 2 or 4 hours
Spain's influence on the history, art, music, drama, literature, and science of the world. Each student does research on a specific project selected in consultation with the instructor. Conducted in English.



Span. 351 Survey of Spanish Literature I 4 hours

Survey of Spanish literature from the Middle Ages through the 17th century. Readings in Spanish from the Medieval, Renaissance and Baroque periods. Conducted in Spanish. *Prerequisite: Span. 200 or equivalent.*

Span. 352 Survey of Spanish Literature II 4 hours

Representative authors and works from the Neoclassic, Romantic and Realist periods as well as the various 20th century literary movements. Conducted in Spanish. *Prerequisite: Span. 200 or equivalent.*

Span. 353 Survey of Spanish American Literature 4 hours

Great authors and works of Spanish American literature from the beginning to the present. Conducted in Spanish. *Prerequisite: Span. 200 or equivalent.*

Literary Studies

Span. 403 Literature of Spain: The Generation of '98 and the 20th Century 4 hours

Works of the novelists and philosophers who searched for the reasons for Spain's decline at the end of the 19th century, and of representative authors of the 20th century. *Prerequisite: Span. 200 or equivalent.*

Span. 406 Contemporary Literature in Spanish America 4 hours

Survey of modern novels and their expression of important aspects of Latin American life. *Prerequisite: Span. 200 or equivalent.*

Span. 451 Literature of Spain:

19th Century Romantics 2 hours
Poetry, plays, and legends from the first half of the 19th century. *Prerequisite: Span. 200 or equivalent.*

Span. 452 Literature of Spain:

19th Century Realists 2 hours
The regional novel of customs. Psychological, social, and thesis novels of the last half of the 19th century. *Prerequisite: Span. 200 or equivalent.*

Span. 453 Literature of Spain: The Golden Age 2 hours

Poetry and drama of the 16th and 17th centuries when Spain was at its artistic and literary height. *Prerequisite: Span. 200 or equivalent.*

Span. 454 Literature of Spain:

Don Quixote 2 hours
Cervantes' masterpiece presenting the contrast of idealism and imagination versus realism and practicality in a great novel. *Prerequisite: Span. 200, or equivalent.*

Span. 487-488 Independent Study 2 or 4 hours each

Span. 490 Senior Project 2-8 hours

Foreign Language

F.L. 320 Seminar in Bilingual-Bicultural Studies 2 hours

A study of the needs of bilingual-bicultural education in the U.S., its history, current theories and practices.

F.L. 425 Introduction to Linguistics 2 hours

Basic concepts and terminology of linguistics. Required of all majors in the department.

F.L. 480 Methods and Materials in Teaching Foreign Languages 2 hours

Methods, teaching materials, lesson planning, and extracurricular activities necessary for the teacher of French, German, or Spanish as a foreign language. (May be taken for credit as Education 480.)

F.L. 481 Foreign Languages for Middle Childhood 2 hours

Methods, teaching materials, lesson planning, and extracurricular activities necessary for the middle childhood teacher of French, German, or Spanish as a foreign language. Special emphasis on aural-oral teaching techniques and characteristics of the transescent language learner.

F.L. 482 Methods and Materials in Bilingual-Bicultural Education 2 hours

Methods, teaching materials, lesson planning and extracurricular activities necessary for the teacher of bilingual-bicultural education. (May be taken for credit as Education 482.)

F.L. 487-488 Independent Study in Foreign Languages 2 or 4 hours

General Sciences

The division of General Sciences is a grouping of courses only. It is not a department and does not offer a field of concentration. It provides a number of programs, many of which are interdisciplinary in nature, designed principally for non-science majors. Some of these courses, however, such as the history of science, are excellent supplements to the college programs of science majors. In addition, special courses are offered for those who are interested in the teaching of science at the secondary school level.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach General Science in the secondary school: Bio. 100, and four additional Biology hours; Chem. 101, 102. Physics 201, 202. G.S. 201, 480. See the Education Department listings for required Professional Education courses. A second teaching field is required.

G.S. 100 Consumer Chemistry 4 hours
A course emphasizing an understanding of chemical concepts relevant to our everyday lives. At the end of this course, a student should be able to analyze and discuss magazine and newspaper articles dealing with the subjects related to chemistry. This course is designed for non-science students. *(May be taken for credit as Chemistry 100.)*

G.S. 101 Natural Philosophy 4 hours
(See Philosophy 352.)



G.S. 201 Astronomy 4 hours
Non-technical course in descriptive astronomy and cosmology, including such topics as the solar system, stars, galactic systems, telescopes, rocketry, and space travel.

G.S. 202 Physical and Cultural Geography 4 hours
Study of the physical processes tending to alter the climate and surface features of the earth and their consequent effects upon human populations.

G.S. 209 History and Philosophy of Science 4 hours
(See Philosophy 353.)

G.S. 210 Science, Technology, and Society 4 hours
Historical examination of the effects of scientific and technological innovations upon various societies, emphasis being placed upon technology and science of the western world since 1850.

G.S. 211 Energy, Conservation and the Environment 2 hours

This course will examine the energy supply/demand and environmental problems facing our society in the future, as well as the necessity of conservation of present resources. The interrelationships between energy available and economic, political, social and technological systems also will be explored.

G.S. 480 Methods and Materials in Teaching Physical and Life Sciences 4 hours

Aims and methods of teaching the physical and life sciences in the secondary schools. Special attention is given to teaching general laboratory procedures and techniques of teaching. Each of the departments in the physical and life sciences participates in the program. *Prerequisite: 16 hours in one of the physical or life sciences or permission of the instructor.*

G.S. 487-488 Independent Study
2 or 4 hours each

Geography

(See General Science 202 and Social Science 302.)

Graphics

(See Computer Science 400 and Fine and Applied Arts 404, 405, and 406.)



selected science courses, plus a Senior Project. These courses will include Chemistry 101, 102, 211, and 212; Physics 201 and 202; Mathematics 281; and 16 hours chosen from Biology 100, 167, 180, 343, 440, and 467.

In the *Management* area of specialization, students must complete 42 hours of selected courses, plus a Senior Project. These courses will include Accounting 211 and 212; Economics 111, 200, 280, 286, 287, and 290; Computer Science 140 or 144; Mathematics 281 and 282; and Communications 302.

In the *Education* area of specialization, students must complete 40 hours of selected courses, plus a Senior Project. These courses will include Education 201, 202, 333, 349, 428, and 470, as well as Education 311, 312 and 476. In addition, students will complete Psychology 100, and Sociology 100 and 362.

For course descriptions, see the listings in the respective departments. Further details of the program may be obtained from the Director of the Health Science Degree Program or the Office of the Dean of the Faculty.

Heuristics

Heuristics 301-302 2 hours each
Investigation and discovery of methodologies of problem-solving within a broad spectrum of academic disciplines and pragmatic pursuits. *Open to juniors and seniors only; permission of instructor required.*

Health Science

Aims

The curriculum in Health Science is interdepartmental, providing the opportunity to earn a Bachelor of Science degree for students who have completed accredited allied health certification programs at other institutions.

In addition to the all-college graduation requirements, students in Health Science may choose among three specializations: Science, Management, and Education. These programs are designed to prepare allied health professionals for graduate or professional school, career changes within allied health fields, or management or educational positions in health professions agencies.

Requirements for a Degree in Health Science

Students admitted to this degree program must have completed an accredited allied health certification in areas such as respiratory therapy, radiology, or a comparable field.

In the *Science* area of specialization, students must complete 44 hours of

History

Aims

To present the origin and development of institutions and ideas; to point out the great traditions that are molding our thought and action today; and to gain a better perspective of our political, economic, cultural, and social life.

Requirements for Field of Concentration

Twelve hours in European history, including History 301-302, 12 hours of American history, including History 201-202. Four hours in political science, four hours in either African or Asian or Latin American history, History 477, and a Senior Project. Students planning to attend graduate or professional schools should anticipate possible requirements in the areas of foreign language, statistics, accounting, and computer technology.



European and World History

Hist. 100 Western Civilization 4 hours
A survey of the Greek, Roman, Medieval and modern periods of western history. Cultural, diplomatic, economic, social and political topics are considered.

Hist. 297-298 Special Studies in History 2 or 4 hours
Designed to permit students to study with various faculty members in the department or with visiting instructors or other competent foreign visitors.

Hist. 301-302 Modern European History 4 hours each
Survey of European civilization from the Renaissance to the present. Second semester begins with 1815.

Hist. 327 British History 4 hours
A survey of British society to the Elizabethan period followed by a more detailed study of the Elizabethan period through World War II. Topics such as the nature of the 18th century politics, the Industrial Revolution, liberal and Victorian England, the impact of the World Wars on British society, and the "Irish Question" will be examined.

Hist. 351 Ancient Near Eastern Civilization 4 hours
(See Religious Studies 351.)

Hist. 353 Hellenistic Civilization 4 hours
(See Religious Studies 353.)

Hist. 381 History of the Middle East and North Africa 2 hours
Historical survey of the rise of the Islamic empires from the time of the Prophet, including the Caliphates, the classical period of Islam, and the Ottoman rule to the end of World War II.

Hist. 382 Cultural Life in the Middle East and North Africa 4 hours
Study of the cultural developments and impact of Islamic civilization, including religion, art, literature, philosophy, and law. (May be taken for credit as R.S. 382.)

Hist. 428 The Middle Ages 4 hours
Study of the decline of ancient civilization, the Byzantine and Islamic cultures, and especially the development of Western Europe to the 14th century.

Hist. 468 Revolution and Reaction in Modern History 4 hours
Comparative study of the English, American, French, and Russian revolutions. Emphasis is placed on the origins and characteristics of revolutions, the roles of revolutionary leaders, and the relationship of the 17th, 18th, and 19th century revolutions to contemporary struggles in the third world. (May be taken for credit as Pol. 468.)

American History

Hist. 201-202 U.S. History 4 hours each
Political, economic, and social growth of America. First semester covers the period of exploration to 1865; second semester from 1865 to the present.

Hist. 225 West Virginia History, Government, and Geography 2 hours
History of the western section of Virginia to the Civil War and the history and government of West Virginia to the present. The physical, political, and social geography of the state is included. Field trips to various sections of the state are included as part of the course.

Hist. 275 Connections 2 hours
A television/seminar program that explores the relationships between technologies of the past and present. The flexible course design will appeal to students of varying backgrounds in science and technology.

Hist. 288 The American Political Novel 4 hours
Political life in the United States at the municipal, state, and federal level as reflected in a number of political novels since 1932. The course examines *Grapes of Wrath*, John Steinbeck; *It Can't Happen Here*, Sinclair Lewis; *All the King's Men*, Robert Penn Warren; *The Last Hurrah*, Edwin O'Connor; and *Advise and Consent*, Alan Drury, plus an additional book selected for each student.

Hist. 295 Local Architectural History 4 hours
Students will study and document the interrelationship between the architectural history of a clearly defined local region and the cultural, social and economic forces which shaped the area. Although most of the work will be done in the field, lectures, readings and surveys will be included. Each student will prepare a photographic and written analytic report of an important historical structure or area. *Prerequisite: Permission of the Instructor.*

Hist. 341 Development of the American Nation 4 hours
History of the United States from 1816 to 1861. Considers growth of American nationalism and sectionalism following the War of 1812; the rise of Jacksonian Democracy, territorial expansion, and the coming of the Civil War.

Hist. 342 Age of Big Business 4 hours
Political, social, and economic history of the U.S. from 1865 to 1914. Emphasis is placed on the growth of industrialism during this period and the resulting attempts at social reform.

Hist. 423 Contemporary U.S.

History 4 hours

The history of the United States since 1945. The course will include a brief review of the Progressive Era, the 1920s and the New Deal. Films, records, contemporary magazines, scholarly journals and newspapers will be used in addition to the text books.

Hist. 426 Latin America 4 hours

Study of the geography, politics, social composition, economic structure, history and problems of Latin America.

Hist. 477 Historical Writings and

Methods 2 hours

Study of the major works of the ancient, medieval, and modern European and American historians with emphasis on the various schools and methods of interpretation. The student also receives an introduction to the nature and methods of history as an intellectual discipline. Emphasis is placed on the technique of historical research, and the art of expression and critical analysis.

Hist. 487-488 Independent Study 2 or 4 hours each

Hist. 490 Senior Project 2-6 hours

Begins first semester of the senior year.



Interdisciplinary Studies

Aims

The interdisciplinary studies program recognizes that some students are more likely to achieve the goals of an "integrated education" and a "self-examined life," as set forth in the Bethany Plan, by designing their own cross-disciplinary field of concentration. The aim of the program is to facilitate such study by providing the machinery needed for its implementation and evaluation; by aiding the student in the study of interdisciplinary methods and problems; by critically evaluating the student's grasp of methods and materials of various disciplines; and by requiring the student to integrate his or her knowledge of materials and methods, derived from various disciplines, around a single problem or idea.

Requirements for Field of Concentration

The interdisciplinary studies program is designed to facilitate the faculty-sponsored or student-initiated program of study that cuts across departmental lines. The initiator of the program is responsible for establishing the content of the special curriculum, for stating the goals of the special curriculum, and for justifying the creation of a special

curriculum. The Committee on Interdisciplinary Study approves or rejects the curriculum proposal. The program must include at least 24 hours (excluding the Senior Project) in an approved core curriculum. The special curriculum may not exceed 72 hours. No more than 48 hours in any one department will be counted toward graduation. All work is supervised by the director of interdisciplinary studies. The director serves as the student's academic advisor throughout the program of study.

Admission to the Interdisciplinary Studies Program

It is recommended that all proposals for admission to the program be submitted to the director on or before the last day of the last semester of the student's sophomore year. Students who apply after this date may find that it will take them an extra summer or an extra semester to meet all requirements for graduation.

Student proposals must follow the outline provided by the Committee on Interdisciplinary Study and must be accompanied by proper supporting documents.

All proposals should be prepared in consultation with the director of interdisciplinary studies.

Senior Year

Senior Comprehensive Examination: Students must have completed at least 24 hours of study in their special curriculum (including all courses designed as required in the original proposal) before they are eligible to take the examination.

The Senior Comprehensive Examination will be designed to measure the student's grasp of methods and materials basic to the disciplines emphasized in the core curriculum; to test the student's capacity for integrating materials and methods from the various disciplines; and to allow the student to evaluate the success of the special curriculum in light of his or her stated goals.

Senior Project: Students who wish to do 4-8 hour Senior Projects must have their programs approved by the director on or before the last day of the last semester of their junior year.

I.S. 100 The Origins of the Western World 4 hours
(See Page 44.)

I.S. 201 World Hunger: The Quest for Survival 4 hours
An exploration of the problems of world food resources, production and distribution. Special emphasis will be placed on inequalities between the have's and have-not's, the effects of malnourishment on human behavior and on social and political conditions, and alternative technological and political solutions to the problem. (*Not open to Freshmen.*)

I.S. 202 Energy: The World Crisis 4 hours
An analysis of the current scarcity of energy resources required for the modern industrial world: its historical and geographical context, its psychological, social and political ramifications, and its possible consequences. Alternative technological solutions will be examined and evaluated. (*Not open to Freshmen.*)

I.S. 203 International Terrorism 4 hours
An examination of the causes, methods and consequences of the current trend toward terrorism as a political weapon in global affairs. Students explore the psychological and ethical aspects of the problem and the media's role in acts of terrorism. *(Not open to Freshmen.)*

I.S. 204 Sex Roles: A Global Perspective 4 hours
A study of the changing roles of women and men in the world. Special attention is given to the traditional values of major human cultures and the repercussions of changing sex roles on those values and on society's institutions. *(Not open to Freshmen.)*

I.S. 210 The Origins of Life 4 hours
This interdisciplinary course focuses on the question "What is the probability that we, as humans, will encounter other life forms in the universe?". The main focus will concern the physical conditions necessary for the origin of life forms in the universe, particularly with respect to the origin of life on Earth. The history of ideas and concepts related to this question and a review of current theories and experimental work in this area will be covered. The economic, philosophical and attitudinal impact of this question on today's society will also be explored. This course is designed for those majoring in the Social Sciences and the Humanities, although it may be taken by those majoring in the Sciences. Appropriate laboratory experiences and demonstrations will be an integral part of the course. *(Not open to Freshmen.)*

I.S. 487-488 Independent Study
2 or 4 hours

I.S. 490 Senior Project 4-8 hours



Library

Aims

The T. W. Phillips Memorial Library provides a variety of educational services to the Bethany College community through an experienced and well-trained staff and a wealth of learning resources. The librarians view their purpose in the following ways: to provide materials which support the Bethany curriculum and the individual

projects of students, to encourage students to ask questions and to assist them in their search for answers through the teaching of bibliographic skills, to help students develop a love of books and an awareness of the vast amount of information available throughout the world, and to develop an understanding of the importance to individuals and to societies of having access to information.

Mathematics

Aims

To provide the general student with a knowledge of the foundations of mathematics; to give the prospective teacher an understanding and appreciation of the fundamental ideas of elementary mathematics; to provide a tool for the technical student; and to give the prospective graduate student a foundation for later study and research.

Requirements for Field of Concentration

The student is required to take the following 24 hours in the department: Math. 201, Calculus I; Math. 202, Calculus II; Math. 203, Calculus III; Math. 354, Linear Algebra; Math. 400, Abstract Algebra; Math. 401, Advanced Calculus.

The student also must complete a Senior Project. In addition, each student must complete one of the following tracks:

Mathematics: CS 142, 143, or 201; twelve hours from the following: Math. 326, 341, 344, 390, 383, 384.

Mathematics-Economics: Math 231, 281, 282; Acct. 211; Eco 200, 301, 302; CS 144 or 145.

Mathematics-Physics: Math 341; Physics 201, 202 (251 or 261), 300; CS 142 or 143.

Mathematics-Computer Science: CS 142 or 143; 201, 202, 290, 390; Math 341.

Mathematics-Education: Math 103, 201, 202, 203, 281, 326, 354, 400, 401, 480, and CS 140.

Only students who have completed the Mathematics-Education track will be recommended for state certification to teach mathematics in secondary school. See the Education Department listings for required Professional Education courses. A second teaching field is required.

Math. 103 Elementary Algebra 4 hours
Designed to prepare the student to take Calculus I. Sets and operations on sets, number systems, solutions to equations, inequalities, functions and graphing, conic sections, synthetic division and the remainder theorem, exponential and logarithmic functions, computation with common logarithms. May not be taken if credit has been earned for Math 201.

Math. 104 Trigonometry 2 hours
Radian measure, trigonometric functions and their graphs. fundamental identities, conditional trigonometric equations, inverse trigonometric functions, vectors, complex numbers, trigonometric form of complex numbers, DeMoivre's Theorem. The material covered in this course is necessary background for Math 202: Calculus II.

Math. 141 Mathematics for the Liberal Arts Student 4 hours
Introduces the non-science major to the spirit and flavor of mathematics. Stresses fundamental concepts with the aim of clarifying the importance of mathematics in relation to other branches of knowledge. Topics that may be covered include sets, logic, the number concept, history of mathematics, the nature and use of geometry, computers, computer programming, and logical puzzles.

Math. 152 Finite Mathematics 4 hours
Intended primarily for students of the biological or social sciences. It is also recommended for non-science majors desiring an acquaintance with mathematics. It is not a precalculus course. Concepts studied include logic, set theory, matrices, probability theory, linear programming, and game theory.

Math. 201 Calculus I 4 hours
Real number system, equations of a line, study of the circle and parabola, functions, limits, and continuity. Techniques of differentiation and integration applied to maximum and minimum problems and to related rates. *Prerequisite:* 3½ years of high school math or Math. 103 or permission of the instructor.

Math. 202 Calculus II 4 hours
Area between two curves, volumes of revolution, moments, centroids, hydrostatic pressure, and work. Integration and differentiation of transcendental functions. Methods of integration including integration by parts, partial fractions, and trigonometric substitution. Polar coordinates and graphs, area, and angles of intersection in polar coordinates. *Prerequisite:* Math. 201 or advanced placement.

Math. 203 Calculus III 4 hours
Intermediate calculus with emphasis on vector methods and functions of several variables. Scalar and vector products. Partial differentiation and applications, directional derivative and gradient. Multiple integrals with physical applications. Expansion of functions. L'Hospital rule, sequences, and series. *Prerequisite:* Math. 202.

Math. 225-226 Mathematics for Elementary Teachers 2 hours each
The first course is a study of the fundamental principles and concepts of arithmetic. The second is a study of intuitive geometry.

Math. 231 Operations Research 2 hours
This course deals with applications of matrix algebra to business and economics, including problems involving cost minimization and profit maximization. (The necessary matrix algebra will be developed in the course.) Primarily designed for students who intend to pursue a career in business. *Prerequisite: Math. 103 or equivalent.*

Math. 281 Statistical Methods 4 hours
Introductory statistical analysis including frequency distribution and graphic presentation of data, measures of central tendency, relative positions in a distribution, variability, the normal curve and its applications, correlation and regression, probability and statistical inference, testing differences between means, introduction to analysis of variance. (Not open to students in the general program.)

Math. 282 Statistical Methods II 2 hours
Testing goodness of fit, contingency tables, regression and correlation analysis, analysis of variance, non-parametric methods.

Math. 326 Introduction to Modern Geometry 4 hours
Euclidean and non-Euclidean geometries; an introduction to synthetic projective geometry; the concept of limit and infinity; geometrical constructions, recent developments and theorems. *Prerequisites: Math. 201, 202.*



Math. 341 Differential Equations 4 hours
Methods of solution of ordinary and partial differential equations and applications to the physical sciences. *Prerequisite: Math. 202.*

Math. 344 Complex Variables 2 hours
Complex numbers, elementary functions, analytic functions, contour integration, Taylor and Laurent series, conformal mapping, boundary value problems, Laplacian equations. *Prerequisite: Math. 203.*

Math. 354 Linear Algebra 4 hours
Geometric vectors, matrices and linear equations, real vector spaces, linear transformations and matrices, and inner product spaces.

Math. 383 Probability & Statistics I 4 hours
Introduction to probability, basic distribution theory, limit theorems, mathematical expectation, probability densities, random variables, sampling distributions, point and interval estimation, tests of hypotheses, regression and correlation, analysis of variance. *Prerequisite: Math. 202 or permission of the instructor.*

Math. 384 Probability & Statistics II 2 hours
In this course, the student will apply the concepts of probability to statistical procedures such as sampling estimations, tests of hypothesis, regression theory, and Bayesian methods. *Prerequisite: Math. 383.*

Math. 390 Numerical Analysis 4 hours
Numerical methods in evaluating integrals and differential equations. Techniques in finding the roots of polynomials and solving systems of linear equations and matrix manipulation. (May be taken for credit as CS 390.) *Prerequisite: CS 142, 143 or 201 and Math 201, 202.*

Math. 400 Modern Abstract Algebra 4 hours
Groups, rings, integral domains, fields, and vector spaces.

Math. 401 Advanced Calculus 4 hours
The Jacobian, Lagrange multipliers, limits and continuity, completeness of the Real numbers, sequences, series, Fourier series and orthogonal functions, partial differential equations, Implicit Function Theorem. *Prerequisite: Math. 203.*

Math 478 Senior Seminar 2 hours
An examination of the historical development and cultural significance of mathematics. A study of modern trends in mathematical thought and application as revealed in the literature. An analysis of career opportunities in mathematics.

Math. 480 Methods and Materials in Teaching Mathematics 2 hours
Approved methods in teaching mathematics at the secondary level; class period activities of the teacher; procedures and devices in teaching; organization of materials, testing, aims, and modern trends. (May be taken for credit as Education 480.)

Math. 487-488 Independent Study 2 or 4 hours

Math. 490 Senior Project 2-8 hours

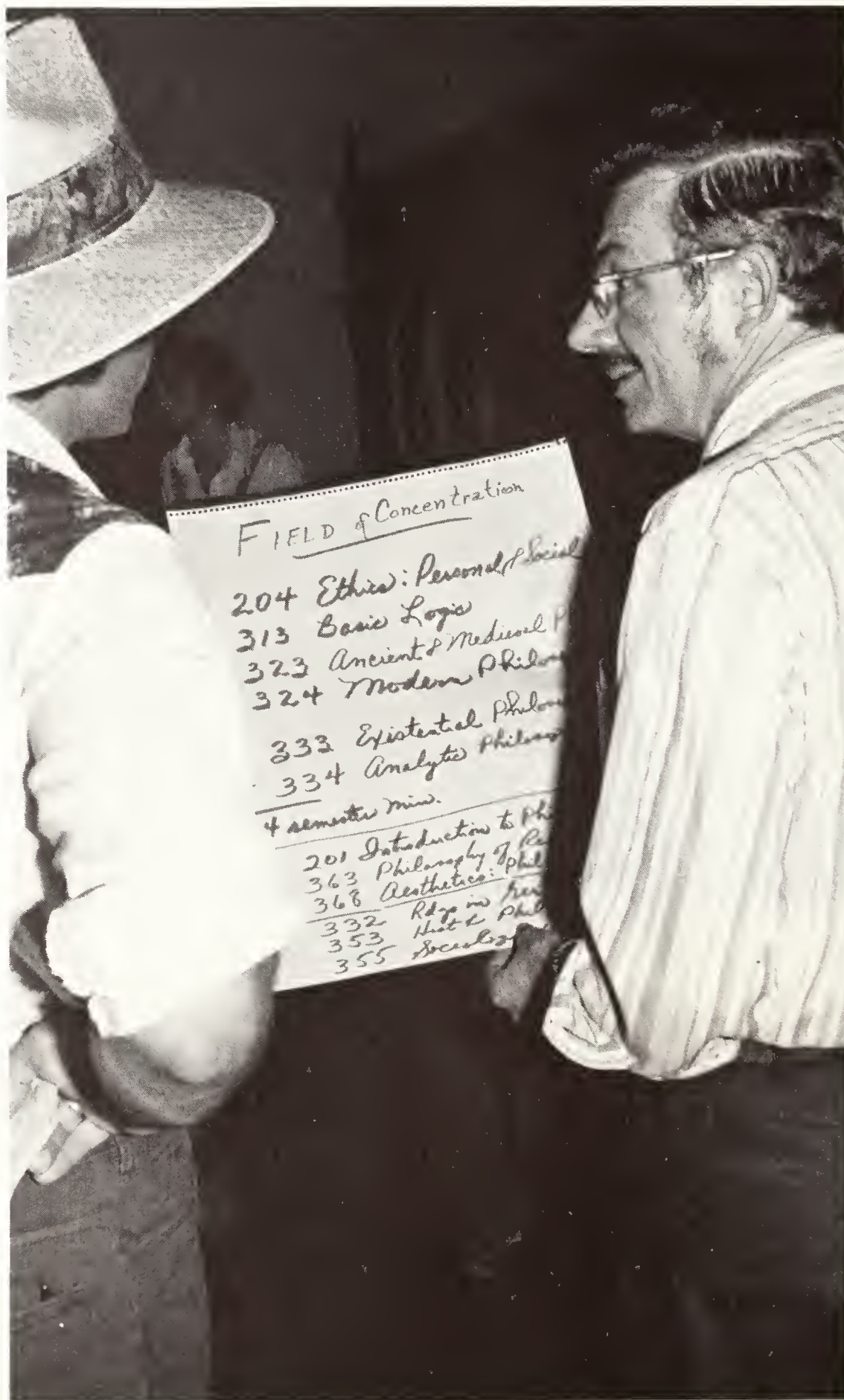
Philosophy

Aims

To assist the student in discovering and developing sound bases for interpreting self and society through a careful examination of his or her beliefs, actions, and claims to knowledge; to assist the student in becoming aware of the nature and status of philosophical problems, commitments, ideologies, and models that serve as the foundation of human life; and to provide the student who expects to pursue graduate studies in philosophy with a sound basis in the major areas of the field.

Requirements for Field of Concentration

Concentration in philosophy may hold promise for several students as one way to achieve a liberal education. For others, philosophy may be an important related field; or it may serve as a good foundation for those planning for graduate work in another field as well as for those who are professionally interested in philosophy.



Concentration in philosophy requires satisfactory completion of a minimum of 24 hours, including Philosophy 123, 124, 323, 324, 325, plus a Senior Project, and Senior Comprehensive Examination. The Senior Project is received and evaluated in the final semester of the student's academic program.

The student who is considering graduate work should be aware that many good graduate programs in philosophy require a reading knowledge of French and German.

Phil. 100 Introduction to Philosophy 4 hours

Intended primarily to involve students in an introductory exploration into the range of problems with which philosophers wrestle. "Living issues" confront us in such vital areas as: the nature of self, man, mind, values, knowing, freedom, and of philosophy, philosophic outlooks, and religious traditions.

Phil. 123 Basic Logic 4 hours

Students are assisted in developing the ability to recognize the differences between emotional intensity and valid argument, between verbal disputes and conclusions that follow (logically) from premises. Recognition of the bases of these differences and development of the very practical abilities to recognize, construct, and analyze various forms of argument and to detect logical errors (fallacies) are important objectives of the course.

Phil. 124 Ethics: Personal and Social 4 hours

Examination of different personal and social foundations upon which ethics or morals can be (and have been) built – such as pleasure, happiness, feeling, reason, obligation, usefulness, and relativism; significant moral problems in several areas of life and work; and basic criteria for moral decision-making.

Phil. 250-259 Special Topics in Philosophy 2 or 4 hours

Phil. 252 Philosophy of Mysticism 4 hours

Examination of what is involved in the experience and claims of several mystical groups or representatives, from ancient to contemporary times. Emphasis will focus on trying to understand the basic claims that mystics make, assessing the kinds of certainty, truth and insight claimed, and exploring the place of "the mystical" in human experience.

Phil. 323 Ancient and Medieval Philosophy 4 hours

Begins with the seventh century B.C. Greek mythic interpretations and moves through early Nature Philosophies, Scepticism, Greek Humanism, the Golden Age, the Roman Period, and the relationship of religion and philosophy in the Medieval Period.

Phil. 324 Modern Philosophy: From the Renaissance Through the 19th Century 4 hours

Begins with the New Learning and moves through the rise of "the scientific spirit," the development of British Empiricism and Continental Rationalism, Kant's "revolutionary" impact on philosophy, and the major thought forms of the 19th Century.

Phil. 325 Twentieth Century Philosophies 4 hours

A survey of the dominant philosophic forms from Bergson, Dewey and Whitehead through the rise of realism, logical analysis, phenomenology-existentialism and language studies.

Phil. 350-359 Advanced Topics in Philosophy 2 or 4 hours

Phil. 352 Natural Philosophy 4 hours

Examination of the physical universe and man's place in it through an emphasis upon the ways in which the physical sciences have altered and are now altering man's understanding of the universe. (May be taken for credit as General Science 101.)

Phil. 353 History and Philosophy of Science 4 hours

Study of some of the major ideas conceived by western man in attempting to comprehend and describe the natural world. (May be taken for credit as General Science 209.) *Prerequisite: one year of college level science or permission of the instructor.*

Phil. 355 Philosophy of Religion 2 or 4 hours

Examination of the major aspects of religion from a philosophic perspective. Study will include: the religious experience, the meaning and significance of faith, belief and criteria, knowledge, proof, evidence and certainty, concept of deity, scope and impact of religion in human life.

Phil. 358 Aesthetics, The Arts, and Philosophy 2 or 4 hours

Examination of the nature of aesthetic experience and its relation to other kinds of experience, as well as its place in art production, appreciation and creativity; the notion of "a work of art"; language used in description, interpretation, and evaluation of art; and different interpretations of aesthetics. Opportunities are provided for giving special attention to particular art areas as well as to "the Arts."

Phil. 477-478 Senior Seminar 2 hours each

This seminar seldom consists of a general review of all areas of philosophy; the topic or particular area of study is chosen as a result of student and faculty conferences. Student ability, interest, and need are important factors. *Conferences with and permission of the head of the department are required before enrollment.*

Phil. 487-488 Independent Study 2 or 4 hours each

Phil. 490 Senior Project 2-8 hours



Physical Education

Aims

To enhance the health of the student; to provide opportunities for students to participate and develop proficiency in sport activities; and to prepare students for professional careers in physical education, recreation, athletic coaching in educational, agency and/or municipal institutions, and sports communication.

Requirements for Field of Concentration — Physical Education

A minimum of 44 hours in the department, which must include P.E. 101, 110, 226, 243, 244, 310, 426, 427, 479, 480, 481, 486, and 490 or their equivalents. Additionally, all students must take Biology 100 and 167, as well as Education 201 and 202.

Optional Program Opportunities:

1. To be recommended for state certification, K-12 students must complete the requirements for the field of concentration and 230, 231. Electives chosen should include four hours selected from P.E. 309, 340, 355 and four hours elective clinics. See the Education Department listings for the required Professional Education courses. A second teaching field is required.



2. To be recommended for state certification 7-9 or 7-12, a minimum of 34 hours in Physical Education is required. This must include the following: P.E. 101, 110, 226, 230, 231, 243, 244, 426, 427, 479, 480; four hours selected from P.E. 309, 340, 355 and four hours elective clinics. Students also must complete Bio. 100 and 167. See the Education Department listings for required Professional Education courses. A second field is required.

3. For non-physical education majors, an emphasis in coaching is available. Eighteen hours are required which must include Biology 167, P.E. 355, 340, 485, and two hours selected from P.E. 300-305. Electives include P.E. 243, 244, 426 or 427.

Requirements for Field of Concentration — Leisure Studies

A. Leisure Management — A minimum of 38 hours in the department which must include 110, 120, 167, 226, 243, 244, 280, 290, 385, 386, 426, 427, 476, 490 and two hours of performance. Additionally, all students must take Accounting 211; Biology 100; Economics 200, 280, 290, 312.

B. Leisure Services — A minimum of 44 hours in the department which must include 110, 120, 167, 226, 243, 244, 280, 290, 309, 385, 386, 426, 427, 476, 480, 490, and two hours of performance. Additionally, all students must take Accounting 211; Biology 100; Economics 200, 280; Fine and Applied Arts 340; Fine and Applied Arts 103, and two hours of Fine and Applied Arts in Theatre.

The following courses are recommended: Soc. 361, 362; Pol. 227.

A department-approved internship in leisure field is required.

P.E. 100-165 Physical Education Performance Courses

Skills in performances, knowledge of strategies, rules, equipment and methods, and participation in sport forms. For non-majors, a maximum of four hours may be credited toward graduation requirements. Specific requirements of majors, six hours (excluding P.E. 150-163), but not to exceed 10 hours.

Courses Available

- P.E. 101 Gymnastics/Dance
- P.E. 110 Aquatics (Advanced Life Saving)
- P.E. 111 Swimming (Basic - Advanced)
- P.E. 120 Folk Dance
- P.E. 121 Horseback Riding
- P.E. 130 Golf - Handball - Paddle Ball
- P.E. 131 Orienteering
- P.E. 132 Archery - Table Tennis
- P.E. 134 Body Mechanics
- P.E. 135 Tennis - Badminton
- P.E. 137 Modern Dance - Rhythms
- P.E. 139 Physical Fitness
- P.E. 140 Field Hockey - Softball
- P.E. 141 Aerobics
- P.E. 142 Track & Field - Wrestling
- P.E. 144 Soccer - Volleyball
- P.E. 146 Football - Wrestling
- P.E. 150 Varsity Baseball
- P.E. 151 Varsity Basketball (M)
- P.E. 152 Varsity Basketball (W)
- P.E. 153 Varsity Cross Country
- P.E. 154 Varsity Field Hockey
- P.E. 155 Varsity Football
- P.E. 156 Varsity Golf
- P.E. 157 Varsity Soccer
- P.E. 158 Varsity Swimming
- P.E. 159 Varsity Tennis (M)
- P.E. 160 Varsity Tennis (W)
- P.E. 161 Varsity Track
- P.E. 162 Varsity Volleyball
- P.E. 163 Varsity Softball

Recommended Sequence of Courses for Physical Education Majors

First Semester	Credit	Second Semester	Credit
Freshman			
Bio. 100 Modern Concepts in Life Science	4	Bio. 167 Introduction to Mammalian Anatomy and Physiology	4
		Psych. 100 General Psychology	4
Sophomore			
P. E. 226 First Aid	2	P. E. 244 Philosophical-Historical Perspective*	4
Ed. 201 Human Development I	4	Ed. 202 Human Development II	4
P. E. 243 Socio-Psychological Perspective*	4	Ed. 242 Principles and Curriculum in the Public Schools	2
P. E. 230 Lab Analysis – Team	2	P. E. 231 Lab Analysis – Individual	2
Junior			
P. E. 479 Teaching Physical Education I	4	Ed. 349 Professional Practicum—Secondary	2
P. E. 310 Adapted Physical Education	2	P. E. 426 Kinesiology	2
P. E. 110 Aquatics	1	P. E. 427 Physiology	2
P. E. – Clinic (300-308)	2	P. E. 480 Teaching Physical Education II	4
		P. E. 481 Elementary School Physical Education	2
		P. E. 101 Gymnastics	1
Senior			
Sp. Ed. 410 Tests and Measurements	2	P. E. 486 Issues in Sport	2
Ed. 401 History and Philosophy of Education	2	P. E. 490 Senior Project	2-8
Ed. 428 Principles and Techniques of Secondary Education	4	P. E. – Elective	2-4
Ed. 470 Observation and Directed Teaching	8	P. E. – Clinic (300-308)	2

*P. E. 243-244 may be taken in the freshman year but Soc. 100, Psych. 100, and/or Phil. 100 are recommended as prerequisites.



P.E. 167 Introduction to Mammalian Anatomy and Physiology 4 hours
(See Biology 167.)

P.E. 200-225 Physical Education Performance Courses 1 hour each
Advanced skills in performance, advanced knowledge of rules, equipment and methods; participation in sport forums. Open to non-majors. *Prerequisite: successful completion of 100 level performance course.*

Courses Available

P.E. 201 Gymnastics
P.E. 210 Aquatics WSI
P.E. 222 Archery - Table Tennis
P.E. 224 Tennis - Badminton

P.E. 226 First Aid as Related to the Principles of Biology 2 hours
(See Biology 105.)

P.E. 227 Personal and Community Health 4 hours
Fundamental knowledge of personal and community health matters pertaining to the social group: communicable diseases, vital statistics, and legal and social regulations.

P.E. 230 Lab Analysis – Team 2 hours
Emphasis on skill development and analysis and cognitive acquisition of rules, equipment, strategies and methods. Sports covered include soccer, volleyball, field hockey, football, basketball, softball.

P.E. 231 Lab Analysis – Individual 2 hours
Emphasis on skill development and analysis and cognitive acquisition of rules, equipment, strategies and methods. Sports covered include archery, badminton, dance, golf, tennis, track and field.

P.E. 243 Socio-Psychological Perspective 4 hours
Consideration of small sport groups as micro-social systems; application of group dynamics theory and small group research to the study of sport groups; investigation of the influence of group member characteristics, environmental factors, interpersonal relations, and group structural characteristics on individual member adjustment and group effectiveness. Designed to investigate those aspects of psychology which influence the performance and the participant in sport. Additional factors such as motives, arousal, aggression, and other socio-psychological variables will be covered.

P.E. 244 Philosophical-Historical Perspective 4 hours
Philosophical inquiry into physical education. Consideration given to general philosophical interpretation of the nature and purpose of physical education. Review of the historical and philosophical changes in American education with emphasis on the developing roles of professional physical education.

P.E. 280 Leisure in Socio-Cultural Patterns 4 hours
Leisure philosophies in the history of man; leisure values reflected in the culture; factors affecting leisure such as demography, technology, and population; social meaning and scope of leisure.

P.E. 290 Leisure and Human Behavior 4 hours
Motivation and leisure behavior; physiological and activity outcomes; man as a social organism; emergence of leadership in leisure pursuits.

P.E. 300-308 Clinics 2 hours each
The major purpose of the sport clinic is to prepare a student to teach the sport or activity(ies) within any phase of the total school environment. Emphasis should be placed on theory (e.g. football theory) and teaching methodology(ies), both skill and theory. Skill advancement should not be an objective of a sport clinic but may be an outcome.

Courses:

P.E. 300	Basketball-Tennis-Golf	2
P.E. 301	Aquatics-Baseball	2
P.E. 302	Track & Field-Soccer	2
P.E. 303	Football-Wrestling	2
P.E. 304	Field Hockey-Volleyball	2
P.E. 305	Games and Sports for Children	2
P.E. 306	Gymnastics	2

P.E. 309 Intramural Sports 2 hours
Organization, administration, and objectives of the intramural athletic programs.

P.E. 310 Adapted Physical Education 2 hours
Variations of the normal types of the human organism at different age levels; therapeutic measures, especially those which correct mechanical defects.

P.E. 340 Prevention and Care of Injuries 2 hours
Common hazards of play and athletics. Preventive measures and treatment of injuries. Red Cross First Aid Certificate may be earned by those who pass the examination. Laboratory fee: \$30.

P.E. 341 Advanced Athletic Training 4 hours
Major emphasis is placed on those skills needed by personnel involved in the field of sports medicine. Orthopedic evaluations of injuries, treatment of crisis situations, and study of conditioning and rehabilitation programs will be covered. *Prerequisites: P.E. 340, 426, 427.* Laboratory fee: \$30

P.E. 350 Sports Information 2 hours
Examination of the varied duties and functions of the sports information director. Special emphasis will be on writing general press releases, fact sheets, and special features; special team and individual promotions, and proper press box procedures, statistics and reporting results. Some attention will be given to photography and use of media.

P.E. 355 Coaching Sport 2 hours
Basic philosophy and principles of athletics as integral parts of physical education and general education. State, local and national regulations and recommendations related to athletics; legal considerations; function and organization of leagues and athletic associations; personal standards and responsibilities of the coach as a leader; public relations; general safety procedures; general principles of budgets, records, purchasing and facilities.

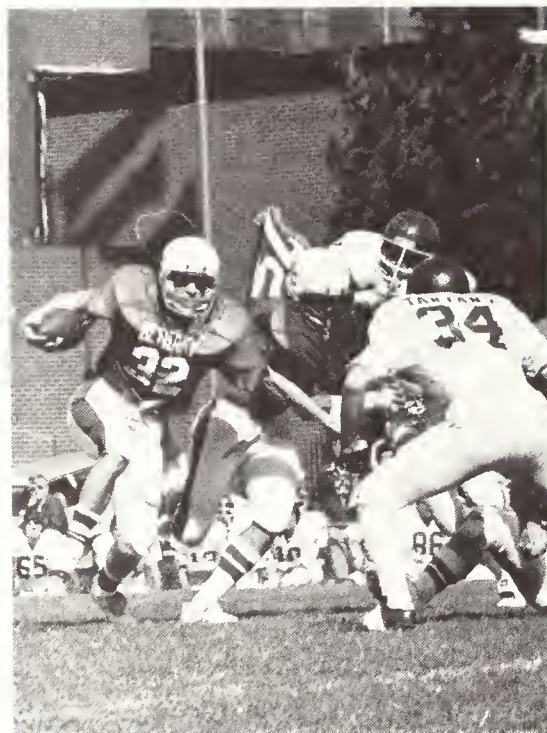
P.E. 385 Fundamentals of Camping
2 hours

History and philosophy of camping; organization of established camping principles and applied techniques of camping; supervision of counselorship in established camps.

P.E. 386 Therapeutic Use of Leisure
2 hours

Leisure activities for the maintenance of healthy levels of fitness within limitations of disability; physical and social skills directed toward rehabilitation; meeting needs of disabled individuals based upon abilities, interests, limitations and psycho-social characteristics.

P.E. 426 Kinesiology 2 hours
Anatomy and mechanics applied in the study of the human body during physical exercise; with special emphasis on the analysis of motion in specific sports skills and exercise patterns. *Prerequisite: Biology 167.*



P.E. 427 Physiology of Muscular Activity
2 hours

Anatomy and physiology applied in the study of the human body during physical exercise; with special emphasis on the application of physiological variables in specific sports skills and exercise patterns. *Prerequisite: Biology 167.*

P.E. 470 Contemporary Problems in Health 2 hours

Study of current health problems, including mental health, nutrition, accidents, physical fitness, and drug education.

P.E. 471 Planned Family and Sex Education 2 hours

Methods and techniques of teaching sex education in the educational system, including such topics as dating, marriage adjustments, pregnancy and the reproductive systems, family planning and fertility control, and divorce.

P.E. 476 Management and Organization of Leisure Services 2 hours

Treatment of management principles and practices and personnel administration; development of management skills; overview of personality and motivation theories serves as a basic focus. Analysis of leisure organizations, including theoretical concepts of organizational planning, goal-setting, executing, and evaluating. Mode of motivation and the impact of individual and group structure.

P.E. 479-480 Teaching Physical Education I & II 4 hours each

Analysis of current methods, materials and techniques pertinent to teaching and administering physical education and athletics. Development of an understanding of the formative and summative evaluation process in the cognitive, affective and psychomotor domains of physical education. Emphasis is given to data-collection techniques (measurement), data-manipulation (statistics), data evaluation and data interpretation in view of teaching. Integration of administrative processes and techniques with teaching and evaluation. Must be taken in sequence.

P.E. 481 Elementary School Physical Education 2 hours

Teaching physical education at the elementary level. A study of this age group's physical, motor, social, and emotional development, plus activities contributing to proper physical development.

P.E. 485 Participation in Coaching
2 hours

Required participation and scheduled seminars for those with no coaching experience. Student is assigned for a sport season to assist in coaching at the interscholastic or intercollegiate level. Assignment of students shall be dependent on master of the sport. *Prerequisite: Permission of the department head.*

P.E. 486 Issues in Sport 2 hours

Analysis of the origins, effects, and implications of current developments in theoretical aspects of physical education, sport, and leisure. Description and explanation of the nature and purpose of sport activities in relation to their conduct in an education, leisure and/or athletic setting. Includes discussion, directed reading and individual study related to the impact of issues, concepts and trends in the areas of education, leisure or athletics.

P.E. 487-488 Independent Study
2 or 4 hours each

P.E. 490 Senior Project 2-8 hours

Physics

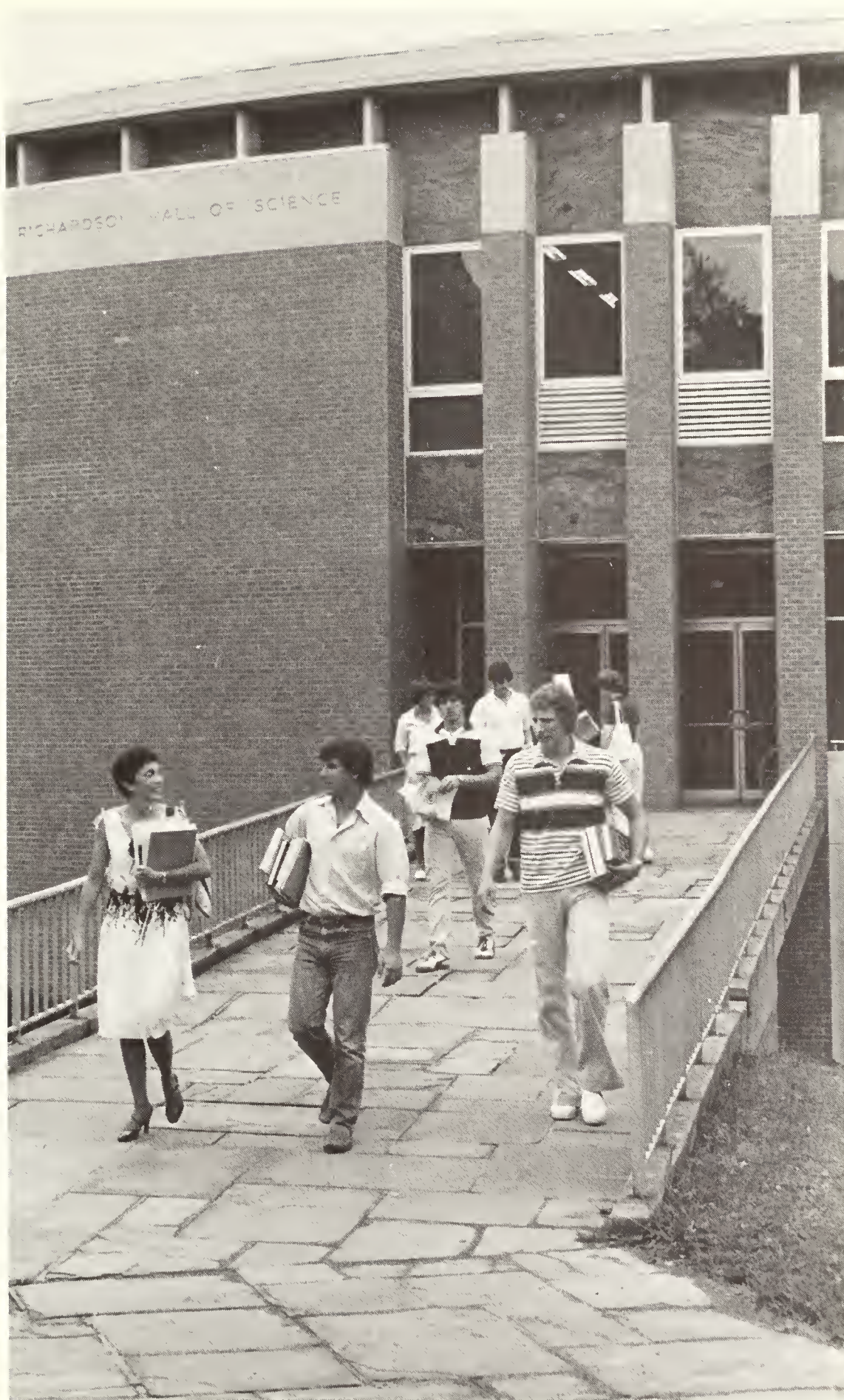
Aims

To introduce students to the current body of knowledge expressing the physicist's concepts of the universe and its physical laws; to provide courses serving the needs of liberal arts students who are concentrating in physics or are interested in the physical and life sciences, medicine, optometry, therapy, engineering, or teaching. Students may choose from a variety of courses to satisfy a distribution requirement, to attain enough competence for a future career in a related field, or to attain sufficient breadth and depth to pursue an advanced degree in physics.

Requirements for Field of Concentration

A minimum of 36 hours in the department, including Physics 201, 202, either 221 or 222, 251, 261, 300, 303, 314, 316, 318 and either 305 or 306, plus a Senior Project. Those students expecting to do graduate work are urged to take both 221 and 222 and both 305 and 306. Mathematics and chemistry are strongly recommended as related fields.

A combined plan with Case Western Reserve University, Columbia University, a dual-degree program with Georgia Institute of Technology, and a Three-Two Plan with Washington University are available to students interested in various engineering or industrial management degrees. Special programs are offered in cooperation with the Education Department for students interested in meeting the



demand for teachers of physics, particularly in upper middle and secondary schools. The required courses in the Physics Department are the following 28 hours: Physics 201, 202, 221, 251, 261, 300, 318, and either 305 or 306. See the Education Department listings for additional required courses in that department. A second teaching field is required. Additional courses in Computer Science, General Science and Physics are suggested for additional interest.

Students interested in careers in engineering, industrial management, mathematical modeling, etc., which might require a background in physics-mathematics-economics-chemistry, are encouraged to speak to the appropriate department head and the director of the dual degree engineering program, or to the director of interdisciplinary studies if they wish to design an interdisciplinary program of study more suited to their career goals than a traditional departmental program.

Phys. 201-202 General Physics 4 hours each

First Semester: mechanics, heat, and wave phenomena. Second Semester: electricity and magnetism, light and selected topics in atomic and nuclear physics. Specifically intended for science, engineering, and other students who have had or are concurrently taking calculus. *Three hours of lecture and three hours of lab each week.*

Phys. 221 Introductory Electronics 4 hours

Introduction to electrical and electronic circuits and their elements, with an emphasis on applications. *Prerequisite: Phys. 201-202, or permission of the head of the department.*

Phys. 222 Digital Electronics 4 hours

An introduction to digital electronics with applications in instrumentation and computer electronics. Topics include Boolean Algebra, basic gates, logic families, encoders-decoders, astable/monostable multivibrators, flip-flops, counters, readouts, shift registers, bi-directional bus structure, serial-parallel/parallel-serial data conversion, D to A and A to D conversion. Three hours of lecture and two hours of lab each week. *Prerequisite: Math 103 or equivalent or permission of the head of the department.*

Phys. 251 Mechanics 4 hours

Particle mechanics, central force motions, motions of rigid bodies, free, forced and coupled oscillations, rotations about an axis, moving coordinates systems, conservation theorems, Lagrange's equations, relativistic mechanics, mechanics of continuous media, and theory of small vibration. *Prerequisite: Physics 201-202.*

Phys. 261 Electricity and Magnetism 4 hours

Electrostatics, magnetostatics, scalar and vector fields, Poynting's vector, electrodynamics, Maxwell's equations, boundary conditions, and wave propagation. *Prerequisite: Phys. 201-202.*

Phys. 300 Modern Physics 4 hours

A presentation, based on mathematical and physical reasoning, of the foundations of modern physics. Treats the subjects of special relativity, kinetic theory, atomic theory, and introductory quantum mechanics on the level of the Schroedinger equation. Intended for chemistry, mathematics, physics, or pre-engineering majors. *Prerequisite: Phys. 201-202 or permission of the head of the department.*

Phys. 303 Statistical Thermodynamics 4 hours

Study of macroscopic systems of many atoms or molecules which provides an introduction to the subjects of statistical mechanics, kinetic theory, thermodynamics, and heat. Material emphasizes concepts useful to those majoring in physics, chemistry, and pre-engineering. *Prerequisite: Physics 201-202.*

Phys. 305 Geometric Optics 2 hours

The study of light from a non-wave theory standpoint. This course includes the study of reflection, and optical instruments. *Prerequisite: Phys. 201-202 or permission of the head of the department.*

Phys. 306 Physical Optics 2 hours

Topics covered in this course include interference dispersion, diffraction, polarization, electro-magnetic nature of light, and quantum optics. *Prerequisite: Phys. 201-202.*

Phys. 314 Introduction to Classical Quantum Mechanics 2 hours

Continuation of the study of classical quantum mechanics begun in Phys. 300. Topics include the three-dimensional Schroedinger equation, selection rules, addition of angular momentum, fine structure in hydrogen, exchange symmetry, the Zeeman effect, and stimulated emission. *Prerequisite: Physics 300 or permission of the head of the department head.*



Phys. 316 Selected Topics in Solid State and Nuclear Physics 2 hours

Continuation of the study of modern physics. Topics include molecular bonding and spectra, free-electron theory of metals, band theory of solids, superconductivity, nuclear shell model, radioactivity, nuclear reactions, and elementary particles. *Prerequisite:* *Physics 314 or permission of the head of the department.*

Phys. 318 Advanced Physics Lab

2 hours

Experiments concerning topics covered in Phys. 300 are emphasized.

Phys. 477 Seminar in Physics 2 hours

Survey of physics for review and correlation of various fields within the discipline.

Prerequisite: *Permission of the head of the department.*

Phys. 480 Methods and Materials in Teaching Physical and Life Sciences

4 hours

For course description see General Science 480. (*May be taken for credit as Education 480.*)

Phys. 487-488 Independent Study

2 or 4 hours each

Phys. 490 Senior Project 2-6 hours

Research problems in theoretical or experimental physics. Experimental physics is offered in such areas as: vacuum systems, machine tool operation, electron systems, spectroscopy, electron microscopy, microwave propagation, nuclear radiation and computer science. Theoretical physics projects are unlimited in scope and are arranged through consultation with the student's faculty advisor.

Politics and Public Policy

Aims

To provide for the study of American politics, political institutions and processes, patterns of political behavior, and international relations, and how these areas are related to the making of public policy; to prepare students for graduate or professional school; to enhance the career objectives of students in the theoretical, technical, and practical dimensions of administration, management, and policy in both the public and private sectors.

Requirements for Field of Concentration

Students are required to complete a minimum of 38 hours in the department exclusive of the Senior Project. All students will complete Pol. 225 and Pol. 478 plus at least 16 additional hours of classroom based courses and at least a 4-hour Internship. Related requirements are History 201-202. Cognate courses are recommended in History, Philosophy, Economics and Business, Sociology, Foreign Languages, Communications, Mathematics (especially statistics), Computer Science, and selected areas of science and technology.

Pol. 225 American Government 4 hours
Introduction to the formal and informal institutions and processes which comprise the American political system at the national level. Emphasis is placed on the mechanics of policy making and the behavior and attitudes of the American electorate.

Pol. 227-228 Intergovernmental Relations
2 hours each

This topic is presented in two half-semester courses. The first covers the introductory material on state and local governments, including U.S. constitutional provisions about states, varieties of state constitutions, typical powers of governors, state legislatures and state executive agencies, the arrangement of state courts and their importance. Major program responsibilities of state and local governments will also be covered here.

The second course will examine the development of the federal-state relationship and recent developments in federal-state and federal-local relations. The major topics included are joint programming, the grant-in-aid system, revenue sharing, and current issues and proposals regarding federal and state program responsibilities. The implications of federal decisions for states and local governments are also included. *Pol. 227 is Prerequisite to Pol. 228.*

Pol. 231 The Politics of Public Policy
4 hours

Examines selected models and approaches to the study of public policy. While providing an overview of the policy process, the focus of attention will be upon how public issues arise, how they are placed upon the public agenda, and how they are kept off that agenda. Selected case studies of public policy making will be analyzed.

Pol. 232 Public Policy Formulation
4 hours

Focuses on the development of proposed courses of action for dealing with public problems. Examines the sources of policy proposals, the criteria used by individuals in making choices and the mobilization of support for the policy choice. Special attention will be paid to the role of the policy analyst and the ethical dimensions of policy choice.

Pol. 243 International Politics 4 hours
Analysis of the factors involved in the decision-making process among nations, traditionally and in a global perspective. This analysis is applied to theoretical, historical, and current political situations.

Pol. 300 Public Administration 4 hours
An examination of the basic concerns of American public agencies, principally federal; problems of planning, organization, staffing and efficiency; problems of their proper place in the political arena; problems of relating democratic principles of administrative actions.

Pol. 311 Public Budgeting Process
4 hours

This course examines the process and politics of budgeting in the federal government, with some attention to state and local budgeting problems. The role of the President and the executive branch in budgeting, congressional processes for budget approval, and the implementation of the budget are studied in depth. Recent budgeting systems used in the federal government are included, as well as examination of the importance of budgeting to overall program and policy development in government. Students will critique an actual public budget as part of the course.

Pol. 320 Legislative Process 4 hours
The course deals with the role of Congress in federal policy-making. The constitutional powers of Congress are examined, but the primary emphasis is on the influences on Congress and its organization for decision-making. The importance of constituents, the executive branch, political parties, colleagues, congressional committees and the media are all included. Some attention is also given to state legislatures.

Pol. 321 Executive Leadership 4 hours
This course focuses on the roles of the President, governors, mayors and other political executives in the American political system. The constitutional powers, historical development, and current responsibilities and problems of the presidency are examined. The President's relations with Congress, the courts, the bureaucracy, the press and the public are also included. Similar issues are examined with respect to governors and local government executives, with emphasis on the variety of powers and approaches possible for state and local executives. Students will examine the career and contributions of one political executive as part of the course.



Pol. 322 Judicial Behavior 4 hours
The role of the courts in the political process and as policy-makers will be a focus of study. Various approaches to the understanding of the behavior of judges and legal system actors will be examined. The influence of values, social background factors, professional socialization, small group dynamics, role perceptions, interest group interaction and recruitment and selection processes on judicial and legal actor decision-making will be studied. The problems of the impact of and compliance with judicial decisions will be examined.

Pol. 325 Political Economy 4 hours
An examination of the links between the economy, polity and policy. A particular focus will be on the role of government in the allocation of goods, especially public goods. Basic socio-economic decision-making mechanisms will be critically analyzed, including the market, government, hierarchy and bargaining. A variety of political economic approaches will be examined including traditional economic, non-economic and Marxist approaches.

Pol. 328 Comparative Government 4 hours
Survey of the major approaches to the study of political systems, with attention to similarities and differences. Focuses on political parties, governmental institutions, ideologies, elites, interest groups, and political culture. The material involves specific case studies of representative countries in Western and Eastern Europe, the Soviet Union, Asia, Africa, Latin America, and the Middle East.

Pol. 331 Public Policy Implementation 4 hours
The analysis of the systemic, organizational and personal factors influencing the behavior of actors who have authority to carry out policy directives. In addition, the influence of intermediaries, administrative lobbies, issue networks, recipients-clients, the media and policy evaluators on the implementation of public policy will be studied. Legal, bureaucratic, and personal imperatives affecting the composition and interaction of actors in relation to specific policies will be examined.

Pol. 332 Public Policy Evaluation 4 hours
This course focuses on the ways in which public programs are evaluated. It examines who does evaluation and the types of evaluation methods that may be used. Students will critique and design policy evaluations as part of the course.

Pol. 339 American Political Parties and Interest Groups 4 hours
Study of major and minor political parties in the U.S. Attention is given to the history, structure, functions, tactics, and financing of political parties in a democratic system, as well as to the American electoral process; and a brief look at foreign party systems. The role of interest or pressure groups in a democratic pluralist society is also given major attention. Pol. 225 or Hist. 201-202 are recommended for background in the field.

Pol. 341 U.S. Foreign Policy 4 hours
Examination of the personalities, assumptions, and mechanics behind the making of U.S. foreign policy since World War II. The material provides a framework for analyzing and evaluating various interpretations of national security and subsequent international commitments. Reference is made to particular examples of foreign policies, such as the Truman Doctrine, Korea, Vietnam, and Sino-American and U.S.-Soviet relations.
Prerequisite: Pol. 225 or permission of the instructor.

Pol. 357 History of Political Philosophy 4 hours
Survey of the major literature in the evolution of political philosophy from the classical period to Karl Marx, with an attempt to gain perspective on both the eastern and western traditions. A special effort is made to relate the principal concepts in political philosophy, such as justice, freedom, and equality, to contemporary politics.

Pol. 465 Constitutional Law 4 hours
Study of the judicial elaboration and interpretation of the U.S. Constitution. A case study approach to the historical development of American constitutional principles. Pol. 225 or Hist. 201-202 are recommended for background in the field.

Pol. 468 Revolution and Reaction in Modern History 4 hours
(See Hist. 468. May be taken for credit as Hist. 468.)

Pol. 470 Internship in Politics, Public Administration and Public Policy 4-8 hours
A faculty supervised off-campus learning experience for a student concentrating in politics with an academic dimension involving off-campus work and a substantive research project. A faculty member must approve the internship experience and the projected academic research work prior to the student's beginning the internship experience. Off-campus work will be jointly supervised by the faculty member and an approved off-campus mentor. The student will be evaluated by the faculty supervisor who may take into consideration an evaluation of the student's performance by the off-campus mentor. In all cases an internship project must be submitted for evaluation by the student in order to successfully complete the requirements for the internship.

Pol. 478 Research Methods in Political Science 4 hours
Consideration of the scope of political science through a survey of the prominent research in the field. Attention will be given to the "scientific" dimension of this work including reference to computer-assisted political analysis.

Pol. 487-488 Independent Study 2 or 4 hours each

Pol. 490 Senior Project 2-6 hours
Begins first semester of the senior year.

Psychology

Aims

To assist the student in gaining a basic knowledge of psychology as the science of human behavior; in developing social awareness and social adjustment through an understanding of the fundamental similarities and differences among people; to encourage both original and critical thinking; and to give background preparation for professions which deal with individual and group behavior.

Two Plans of Concentration

Two plans of concentration are offered – one leading to the Bachelor of Arts degree and the other to the Bachelor of Science degree.

The Bachelor of Arts plan is designed for the student who, while not wishing to pursue psychology in its professional scientific aspects, does wish to explore in some depth those areas of psychology that are applicable to his or her future life as an intellectually rounded and responsible citizen. The program is particularly relevant to individuals who are interested in working in the mental health professions or counseling either as paraprofessionals or in fields such as school psychology, rehabilitation, or guidance counseling. This program is not intended for those planning to enter regular graduate programs in psychology.

The Bachelor of Science plan is for those students who are interested in the scientific aspects of psychology – particularly for those who are considering graduate work in psychology. The department, in good conscience, will not be able to recommend to Ph.D. programs in psychology any student who has not completed the requirements of this plan.



Requirements for the Bachelor of Arts Degree

The Bachelor of Arts degree requires a minimum of 24 hours in the department (including Psychology 100, 103, 399, 415, and 477) plus a Senior Project.

Depending upon the direction of the student's interests, the department sees as particularly useful and relevant courses in sociology, social work, philosophy, child and adolescent development, biology, and the history of scientific thought. A number of upper-level courses assume the ability to use the word-processing facilities of the computer.

Requirements for the Bachelor of Science Degree

The Bachelor of Science degree requires a minimum of 30 hours in the department, including Psychology 100, 103, 311, 312, 399, 415, and 477, as well as a Senior Project. Six hours are also required in natural science. Two of these must either be in physiological psychology (Psychology 335) or in biology courses stressing animal biology, physiology, or genetics. The remaining four hours may be in similar biology courses, physics, or chemistry (including Chemistry 100).

Students planning on graduate school in psychology are also advised to take at least one course in calculus and to obtain some skills in computer programming. It should also be kept in mind that most graduate schools require Ph.D. candidates to show a reading knowledge of one or two foreign languages, usually French, German, or Spanish.

Psych. 100 General Psychology 4 hours
Introduction to the general field of psychology, including learning, motivation, sensation, perception, cognition, personality, abnormal behavior, testing, physiological psychology, and social psychology. During the academic year, the course is offered in two formats. There are three hours of lecture and two hours of lab each week, plus three hour exams and a final. A full-semester course.

Psych. 103 Quantitative Methods in Psychology 4 hours
An introduction to the basic problems and techniques of measurement in psychology and to basic statistical techniques used in psychological research. This course also includes an introduction to designs for research and experimentation. Highly recommended for those planning to take upper-division courses in psychology and required of all psychology majors. *Four lectures and one lab each week during the first half of the semester; two lectures and one lab each week in the second half of the semester.*

Psych. 186 Psychology of Consciousness 2 hours
Consideration of the nature of human consciousness, concentrating upon both normal consciousness and altered states of consciousness resulting from dreams, hypnosis, biofeedback, drugs, and meditation. Emphasis is given to recent explorations concerning two major modes of consciousness: the intellectual and the intuitive. Does not fulfill distribution requirements in the physical and life sciences. Full semester course. *Two, one-hour meetings each week.*

Psych. 275 Student Development in Higher Education 2 hours
(See Education 275.) Does not fulfill distribution requirements in the physical and life sciences.

Psych. 287 Organizations and Human Behavior 4 hours
(See Econ. 287.)



Psych. 311 Experimental Psychology I 4 hours
Encourages the student to become conversant with the basic factual and theoretical content of experimental psychology at an intermediate level, and to engage in experimental work in the areas of sensation, perception, and cognitive processes. Some familiarity with computers is highly desirable. Full-semester course. *Prerequisites: Psych. 100, 103. Three lectures and one lab each week.*

Psych. 312 Experimental Psychology II 4 hours
Continuation of Psych. 311, covering the areas of learning, perceptual-motor skills, and motivation. Full-semester course. *Prerequisites: Psych. 100, 103. Three lectures and one lab each week.*



Psych. 315 Modification of Behavior

2 hours

The course has two main aims: to help the student learn systematically to analyze behavior in terms of reinforcement principles as developed by Skinner, Wolpe and others, and to help the student develop skills in the application of these principles to the modification of behavior in practical situations. Examples of the latter arise in the areas of behavior disorder, child-rearing, the work situation, and habit change. A full-semester course.

Psych. 324 Personality and Adjustment

4 hours

Covers major theories of personality and principles of personal adjustment and growth, including development, motivation, dynamics, problems in group living, and intellectual, emotional, and social adjustment. The course should be valuable to the potential doctor, nurse, social worker, child-care worker, teacher, or parent. Full semester course. *Three lectures and one lab each week.*

Psych. 325 Abnormal Psychology

4 hours

The development, dynamics, social significance, and theoretical implications of deviant behavior. While the traditional psychiatric diagnostic categories are studied, there is a strong emphasis upon alternative approaches in the medical model of abnormality. The concepts of normality and abnormality in relation to cultural norms and stereotypes are examined in depth. The course should prove particularly useful to students planning on a career in the helping professions. Full semester course. *Four lectures each week.*

Psych. 326 Experimental Social Psychology

4 hours

Aspects of social behavior and specific social issues are examined within the context of theory and experimental research. Topics include social factors in the development of morals; cooperation and competition; aggression; racial and social-class differences in personality, motivation, and language; attitudes and attitude change; authoritarianism and obedience; interpersonal and group processes (affiliation, attraction, perception, conformity, and leadership); and discussion of drug and sex issues. Full-semester course. *Four lectures each week.*

Psych. 327 Seminar in Theories and Techniques of Psychotherapy and Counseling

4 hours

Provides the student with a basic knowledge of the varied theories and techniques used in professional psychotherapy and counseling. Both academic and experiential learning are included, which should be particularly useful to students interested in going on into one of the helping professions such as clinical psychology, psychiatry, social work, school psychology, counseling, or occupational therapy. *Prerequisites: Psych. 100 and 324 or 325 plus permission of the instructor.*

Psych. 328 Human Sexuality

2 hours

Examination of the various psychological, biological, social, comparative, legal, and ethical aspects of human sexuality. In addition to sexual anatomy, physiology, birth control, and venereal disease, the course takes up current issues such as a sex-role development, sex reassignment, and sex therapy. The course does not fulfill distribution requirements in physical and life sciences.

Psych. 335 Biological Bases of Behavior

2 hours

Examines the neural and biochemical substrates of the more important aspects of animal and human behavior. Half-semester course. *Prerequisite: Psych. 100. Three hours of lecture and one lab each week.*

Psych. 399 Junior Preparation

4 hours

This course is designed to help students round out their background in the content and methods of psychology in preparation for their senior year. An intensive review of the various fields of psychology is undertaken and methods of field research and program evaluation strategies are studied. Some familiarity with computers is highly desirable. *A full semester course meeting three hours per week.*

Psych. 410 Tests and Measurements

2 hours

(See Sp. Ed. 410.)

Psych. 415 Systematic Psychology

4 hours

Examination of the systematic positions and theories that have been important in the history of psychology, as well as a brief review of the philosophical bases underlying these positions. Full-semester course. *Four lectures each week.*

Psych. 477 Senior Seminar

2 hours

An introduction to professional opportunities in psychology and related fields and an exploration of value and ethical consideration. Continued guidance on senior project and senior comprehensive examinations also will be provided during the course.

Psych. 480 Methods and Materials in Teaching Psychology

4 hours

Study of the methods and materials used in teaching psychology in the secondary school. The course has a systematic and experimental emphasis. (May be taken for credit as Education 480.) *Prerequisite: 16 hours of psychology.*

Psych. 487-488 Independent Study

2 or 4 hours each

Psych. 490 Senior Project

2-8 hours



Religious Studies

Aims

The department desires to continue the historic interest of the College in the intellectual, spiritual, and social development of the community. Students are encouraged to join in the exploration of thought and research in the field of religious studies. Biblical studies form the central core of departmental offerings. In addition, each student also examines the relationship between religion and culture (both ancient and modern). The personal integration of knowledge and faith for an understanding and appreciation of value systems is a conscious goal of the department.

The department's aims are future-oriented. Rather than teaching a particular point of view, the department seeks to assist the student in learning how to acquire, evaluate, and use religious knowledge. Each course is consciously designed to enhance the student's efforts to interrelate his or her varied academic, social, and personal experiences.

Requirements for Field of Concentration

A minimum of 24 hours (excluding Religious Studies 100) in the department, a Senior Project, and the successful completion of the Senior Comprehensive Examination constitute the stated requirements of the department.

The Comprehensive Examination in Religious Studies emphasizes Biblical studies, early Christianity, and contemporary religious thought and culture.

Students electing the field of religious studies are strongly urged to develop a proficiency in one or more foreign languages, to formulate a related field of concentration and to consider spending at least one semester in study abroad.

R.S. 100 Judaeo-Christian Heritage and Contemporary Living 4 hours

Study of the Judaeo-Christian heritage with the aim of understanding how Biblical writers reflect on the basic human and social issues which continue to engage contemporary people. Study is done within a triple context: (1) the Biblical tradition; (2) the liberal arts tradition of Bethany College; and (3) contemporary questions.

R.S. 300 Old Testament Literature and Thought 4 hours

Study of the development of Israelite religion and its institutions, the history of the various types of Old Testament literature, and the thought and theological motifs of Old Testament writers. Students will be assisted in acquiring a developmental understanding of Old Testament religion and an appreciation of its continuing value. *Prerequisite: R.S. 100 helpful, but not required.*

R.S. 302 Wisdom Literature 2 hours

Critical and appreciative reading of the literature of the Old Testament wisdom school (Proverbs, Job, and Ecclesiastes). Students are assisted to understand the ways in which the wisdom school sought to understand human meaning and destiny.

R.S. 304 Mission and Message of the Prophets 2 hours

Critical and appreciative reading of selected writings of the classical prophets of ancient Israel (Amos, Hosea, Isaiah, Jeremiah, and Ezekiel). Students are assisted to understand the major ideas of the prophets and the relationship of these ideas to the issues facing both ancient and modern people.

R.S. 310 New Testament Literature and Thought 4 hours

Study of the development of earliest Christianity (A.D. 30-125) and its institutions, the history of various types of New Testament literature, and the thought and motifs of various New Testament writers. Students will be assisted in acquiring a developmental understanding of the New Testament and an appreciation of its continuing value. *Prerequisite: R.S. 100 helpful, but not required.*

R.S. 311 Studies in the Gospels

4 hours

Students are assisted in developing the means to discern the message of the different gospel writers. While concentrating on the Gospel of Mark, the course equips the student to do basic study in any of the Gospels. *Prerequisites: R.S. 100 and permission of the instructor.*

R.S. 312 The Pauline School 4 hours

Students are assisted in developing an understanding of the Apostle Paul as a man, his thought, his place in early Christianity, the thoughts of his disciples and his opponents. *Prerequisites: R.S. 100 and permission of the instructor.*

R.S. 313 Apocalypticism 4 hours

Students are assisted in developing a facility to understand the messages of Daniel, the Revelation of St. John and other apocalyptic materials, to explore the history of apocalyptic imagery and literary relationships, and to discover the backgrounds and causes of the rise of the apocalyptic movement.

R.S. 314 The Gospel of John 2 hours

The student will study the Fourth Gospel as an important document in the history of religions, as a special literary form and composite, as a witness to the historical Jesus, and as a continuing witness to faith and to the meaning of human existence.

R.S. 322 Sociology of Religion 2 hours
(See Sociology 356.)

R.S. 336 20th Century Protestant Thought 4 hours

Students read and discuss the work of leading 20th century Protestant thinkers such as Paul Tillich, Karl Barth, Dietrich Bonhoeffer, and the Niebuhrs.

R.S. 341 The Religions of India 4 hours

Students explore the chief features of Indian religion. The course begins with an examination of Hinduism and includes a survey of the origins of Buddhism and a study of Indian Islam and Sikhism.

R.S. 342 The Religions of China 4 hours

Students explore the chief features of Chinese religion. The course begins with a consideration of the most ancient features of Chinese religion, continues with a study of the historical development of Confucianism, Taoism, and Chinese Buddhism and concludes with an analysis of the influence of religion on Chinese society.

R.S. 351 Ancient Near Eastern Civilization 4 hours

This course introduces the students to the historical development of life, culture, and religions of Mesopotamia, Egypt, and the Syro-Phoenician coast, including international relations from pre-history to Alexander the Great. (May be taken for credit as History 351.)

R.S. 352 Islamic Civilization 4 hours

Study of the life and background of the prophet, the *Qur'an*, the development of Islamic thought, and the early Islamic empires.

R.S. 353 Hellenistic Civilization 4 hours

Development of an acquaintance with the Graeco-Roman Oriental world based on a survey of social and cultural developments from Alexander the Great to Julius Caesar. (May be taken for credit as History 353.)

R.S. 361 American Catholicism 2 hours

A descriptive study of contemporary American Catholicism and its roots. The course emphasizes such topics as: modern Catholic worship, the crisis of authority, the "immigrant church," the church and political life, Catholic education, and the charismatic movement.



R.S. 362 American Judaism 2 hours
A descriptive study of contemporary American Judaism and its roots. The course emphasizes the life-cycle customs of Judaism. Jewish holidays are studied in the context of Jewish history. The course seeks to develop a broader understanding of the modern Jewish community in the United States and is supported by a grant from the Jewish Chautauqua Society.

R.S. 363 Alexander Campbell and His Reformation 4 hours
Students will study the backgrounds, life, thought and historical contexts and outcomes of Alexander Campbell, his colleagues and successors. Lectures, debates, multi-media materials and field work will be included. Special emphasis will be placed on primary sources and each student will complete a satisfactory primary research project.

R.S. 370 Renaissance and Reformation History 4 hours
The course will trace briefly the development of the Renaissance and will concentrate on the chief reformers of the sixteenth century – Zwingli, Luther, and Calvin.

R.S. 373 History of Early Christianity 4 hours
Introduction to the origins and expansion of Christianity from the period of Augustus Caesar to Constantine. The problems of institutions, consolidation, varieties, divisions, and unification will be explored in historical context.

R.S. 374 History of Eastern Christianity 4 hours
A study of the development of the Eastern Roman Empire and Byzantine Christianity from Constantine to the fall of Constantinople. Special attention will be given to the Eastern Fathers in both the Greek and Semitic developments of the church.

R.S. 376 History of Medieval Christianity 4 hours
Examination of the major developments within European Latin Christianity between the sixth and fourteenth centuries. Topics covered include: the conversion of Europe; relationships between church and state; contacts and conflicts with Byzantine Christianity and Islam; monasticism; the development of theology and Christian culture; reform, dissent, heresy and schism.

R.S. 380 Ethics and Society 4 hours
Studies in contemporary social-ethical and public policy issues from the perspective of classical and modern Judaeo-Christian thinking. Topics such as political and economic justice, war and peace, revolutionary movements, and environmental policy will be included. (No prerequisites, although completion of R.S. 100 is desirable.)

R.S. 381 Church Leadership Practice 2 hours
Development of an understanding of the theory and practice of public worship, preaching, and church program planning.

R.S. 382 Cultural Life in the Middle East and North Africa 4 hours
(See History 382.)

R.S. 383 Introduction to Bioethics 4 hours
Consideration of the religious and ethical dimensions involved in human decisions concerning abortion, artificial birth control, genetic planning, euthanasia, organ transplants, medical experiments on human subjects, and various forms of behavior modification.

R.S. 487-488 Independent Study 2 or 4 hours each

R.S. 490 Senior Project 2 to 8 hours

Science Applications (Honors)

Aims

The Honors Program in Science Applications prepares students in the current theoretical and applied knowledge, skills, and techniques of applied sciences and engineering design; provides an engineering and scientific foundation for applied research through integrated studies in the physical and life sciences, mathematics, and computer science; produces a graduate with science and engineering preparation for graduate schools and corporate, industrial, and government research career options; achieves a combined technical and liberal arts education serving future career advancement in technological leadership roles.

Requirements for Field of Concentration

Admission to this program is selective. All students in the program are required to complete a common base of 40 hours, including Chemistry 101-102, Physics 201-202, 222, Computer Science 201-202, Mathematics 201-202 and 341. In addition, all students will complete 8 hours of a common, upper-level, applied research and design component

consisting of an Internship, a Research and Applications course, and a Senior Project; these are, respectively, Science Applications 470 (2 hours), 475 (4 hours), and 490 (2 hours).

All students will also elect one of the following options: 1) For the degree in Science Applications, 24 hours of course work selected from the courses listed below, at least 12 of which must be chosen within a single area as listed. 2) For the degree in Chemistry, Mathematics, Computer Science, or Physics, 24 hours within the appropriate listing of courses for that field. (Biochemistry is part of the Science Applications degree program but is not a separate field of concentration.)

Chemistry 211-212, 226, 324, 326, 402, 414.

Mathematics 203, 344, 354, 383-384, 390, 401.

Computer Science 280, 290, 330, 370, 380, 390.

Physics 251, 261, 300, 303, 305-306, 314, 316.

Biochemistry: Biology 290, 343, 425, 467; Chemistry 211-212, 314.

It is recommended that students in the program also complete a Professional Core in Management, Public Affairs, or Communication.

S.A. 470 Internship in Science Applications 2 hours

A faculty supervised, off-campus industrial work experience, co-sponsored and coordinated with a participating industry. *Prerequisites: Junior standing and approval of the Director of the Honors Program in Science Applications.*

S.A. 475 Research and Applications 4 hours

Intensive exploration of research and design techniques with specific applications in the student's individual area of specialization. This course is to be coordinated with the Internship and Senior Project. *Prerequisites: Senior standing and approval of the Director.*

S.A. 487-488 Independent Study 2 or 4 hours each

S.A. 490 Senior Project 2-8 hours

Social Sciences

Social Sciences is a grouping of courses only. It is not a separate department. Students who participate in such programs as the American University Washington Semester and other similar off-campus programs may receive credit in this area.

Students majoring in History, Politics and Public Policy, Economics or Sociology who wish to be recommended for state certification in Social Studies must complete the following courses: History 100, 201, 202, 225; Soc. 100 or 220; Eco. 200; G.S. 202 or Soc. Sci. 302; Pol. 225, as well as 24 hours in their major field. See the Education Department listings for required Professional Education courses.

Soc. Sci. 302 World Geography 2 hours
Study of the physical, social, and political geographic factors of the world. Recent changes in Europe, Asia, and Africa are discussed.

Soc. Sci. 320 Cultural Backgrounds of British Literature 4 hours
Survey of British history from the Celtic times to the present. Major political developments such as the development of parliamentary government and the constitution are taken into account, but major emphasis is placed on extra-political matters such as the development of the English language, music, art, architecture, drama, the English church, education, and domestic life. Every effort is made to take advantage of the locale to visit museums, castles, cathedrals, universities, Parliament, theatres, and concert halls. Taught in Oxford, England.

Soc. Sci. 480 Methods and Materials in Teaching Social Studies 2 hours
Nature, objectives, and curricula of social studies in junior and senior high schools. Concepts and methods of approach are emphasized. Methods, techniques, teaching aids, resource units, lesson plans, evaluation, and teaching reading and study skills. (May be taken for credit as Education 480.)

Sociology and Social Work

Aims

To acquaint students with basic theories, research techniques, and applied practices in sociology, social work, and anthropology, and to prepare students for graduate study in these disciplines, or to enter professions in community service and other fields which require a knowledge of social relations.

Requirements for Field of Concentration in Sociology

A minimum of 36 hours in Sociology, including Sociology 100, 200, 209, and 477, plus a Senior Project. Also required: Mathematics 281 or Psychology 103. Sociology 100 or 220 is a prerequisite to Sociology 200, 309, 320, 329, 330, 353, 361, 362, 470, and 477.



Soc. 100 Introduction to Sociology

4 hours
Introduction to basic concepts and perspectives of the study of society. Includes analysis of principal institutions and social processes.

Soc. 105 Computers and Society 2 hours
(See Computer Science 100)

Soc. 200 Sociological Theory 4 hours
Examination of social thought with primary emphasis upon the principal theorists from the 19th century to the present.

Soc. 205 Social Problems 4 hours
Though emphasis and illustrations will vary as the scene changes, the course is built on the analysis of fundamental and continuing problems and dilemmas, such as crime and delinquency, racial and ethnic relationships, health care and maintenance, employment, housing, poverty, and environmental issues.

Soc. 209 Research Methods 4 hours
The student is guided through the formal process of designing an empirical project. Emphasis is placed upon systematically reviewing relevant literature and justifying decisions concerning techniques to be used. Includes hypothesis formation and testing, methods of data collection and analysis, and problems of sampling. *Prerequisite: Math 281.*

Soc. 210 Race and Minority Concerns 2 hours
A survey of racial, cultural, ethnic, age and sexual diversity with emphasis on the effects of prejudice and discrimination on minorities.

Soc. 220 Cultural Anthropology 4 hours
Examination of cultural variability, especially in terms of its influence on human behavior. Comparative analysis of cultural systems with an emphasis on contemporary non-Western societies.

Soc. 300 Social Movements 2 hours
Examination of the origins and development of religious, political, agrarian, and labor movements. Both historical and contemporary examples of revolutionary and reform movements will be analyzed.

Soc. 302 Schools and Society 4 hours
(See Education 302)

Soc. 309 Formal Organization 4 hours
Analysis of commercial, industrial and public organizations and bureaucracies. Morale, subgroup conflict and cooperation, and the impact of social environment or organizational structure.

Soc. 329 Population Study 2 hours
An introduction to demography. Theories and methods of studies concerning population size and composition. Trends of population change in the world and in the United States.

Soc. 351 The Family 4 hours
Examination of the structure and function of the family as a basic unit of social organization. Changing nature of marriage and the family in American society.

Soc. 353 Social Stratification 2 hours
Study of forms of social stratification and differentiation. Class, prestige and power as the bases of stratification. Theories of the cause of social stratification and social mobility.

Soc. 356 Sociology of Religion 4 hours
Formal religion and its functional equivalents both in primitive and modern societies. The relationship between religion and other social institutions. Religion and social change. May be taken for credit as Religious Studies 322.

Soc. 361 Deviance and Social Control 4 hours
Sociological perspectives focusing on problems of deviance such as crime, mental illness, and sexual deviation. Institutions of correction and rehabilitation are examined.

Soc. 362 Socialization 2 hours
Study of socialization as a process whereby the individual becomes a functioning member of a group. Processes of resocialization.

Soc. 470 Field Work 2-8 hours
Available to students who are sufficiently advanced in their theoretical and methodological studies to undertake investigation of a practical or theoretical problem in a field setting. *Prerequisite: Permission of Department.*

Soc. 477 Senior Seminar 4 hours
Consideration of conceptual and research problems in a seminar setting. Includes preparation for comprehensive examinations and senior projects.

Soc. 487-488 Independent Study 2 or 4 hours each
Studies may be planned as extensions of, or separate from, existing Department offerings.

Soc. 490 Senior Project 2-8 hours
For students approaching completion of their majors. Designed to help students evaluate their activities in sociology and to integrate their educational experiences.

Requirements for a Degree in Social Work

The goal of the social work program is to prepare the student for beginning social work practice. Students will accomplish this goal by completing 38 hours of social work courses to include: S.W. 120, S.W. 201, S.W. 202, S.W. 220, S.W. 230, S.W. 240, S.W. 310, S.W. 350, S.W. 352, S.W. 470, and S.W. 477. In addition, students must complete Bio. 100, Soc. 205, Soc. 209, Soc. 210, Psych. 100, Psych. 326, Pol. 227, and completion of a Senior Project in Social Work. Social Work 120 or 240 or permission of the department head is a prerequisite to all courses in Social Work, except Social Work 125-150, 230 and 310.

Within the Social Work curriculum students will be able to pursue a variety of concentrations to include child welfare, aging, public welfare, health care, corrections, mental health, school social work, and church community relations.

Students electing the field of study in Social Work are expected to take a course in human anatomy and physiology and to select Perspectives courses to include: Economics 200, Education 201 and 202, Sociology 100, Psychology 315, 324 and 325.

S.W. 120 Introduction to Social Welfare and Social Work 2 hours

An examination of the origin and development of social welfare as an institution in the United States. Examination of the role of the social worker, and the place of the profession in society.

S.W. 125-150 Special Topics in Social Work 2 or 4 hours each

Seminars in this category take up special topics of mutual concern to faculty and students.

S.W. 125 Child Welfare Services 2 hours

This course is a comprehensive study of the principal child welfare services. It begins by defining child welfare, placing it as a field of practice within social work, and presents a scheme for the categorization of child welfare problems in terms of role theory. It provides a historical perspective on how and why welfare services developed to describe the current socioeconomic context in which they operate. Topics covered include adoption, child abuse and neglect, day care, foster care and other child caring institutions.

S.W. 130 Alcohol Use & Abuse 2 hours

Designed to provide alcohol education to those interested in better understanding the effects of alcohol on individuals, families, and the community at large. Topics for study include: the use and misuse of alcohol throughout history, effects of alcohol on the human body, personal and societal costs of drinking, etiology of alcoholism, and considerations for special populations.

S.W. 135 Working With the Aged

2 hours

This course is a study of the biological, psychological, social, economic, cultural and spiritual factors of the aged in society. The course will provide an overview for persons in the helping professions who want to work with older people individually or with members of families, groups or organizations. Research efforts will be presented that illuminate our present knowledge about various aspects of aging and about the heterogeneous elderly population in the United States.

S.W. 201 Human Development I

4 hours

(See Ed. 201.)

S.W. 202 Human Development II

4 hours

(See Ed. 202.)

S.W. 220 Social Welfare Policies and Services 4 hours

Examines the social, political and economic context of social welfare policies and programs. Analysis of specific policy issues and their implications for professional social work practice.

S.W. 230 Social Welfare Institutions 2 hours

Critical examination of organized societal response to social welfare need. Conducts a conceptual analysis of the scope and intent of social welfare programs, clarifying the concept of social welfare and showing how welfare intent is carried into constructive social action.

S.W. 240 Introduction to Social Work Practice 2 hours

An introduction to basic dynamics necessary to engage clients in the social work process. Beginning listening, interviewing, and recording skills will be emphasized.

S.W. 310 Human Behavior and the Social Environment 4 hours

Focuses on the person as an individual with the continuing potential for growth and change. The maturational process of the individual will be followed with emphasis being given to interaction with the social environment, coping abilities and capacity for change. The bio-psycho-socio-cultural determinants of behavior are studied integrating knowledge of the person-in-his/her situation.



S.W. 350 Social Work Practice and Methods I 4 hours

Basic theories and concepts undergirding skills for professional social work practice. Study focuses on professional values, social work roles, and social work client relationships. Skills in interviewing, data collection and case recording are explored and practiced.

S.W. 352 Social Work Practice and Methods II 4 hours

In-depth and advanced examination of the social work process. Problem solving and intervention strategies are studied in relation to prevention, maintenance, and rehabilitation. The skill of social work practice is explored in the context of current programs and practice methods.

S.W. 470 Field Placement 12 hours

An educationally directed internship experience in a social welfare agency or program as a social work practitioner. The field experience will involve five full days a week agency experience during the fall semester of the senior year of study. The placement is designed to test and increase student practice skills with the goal of self direction and the appropriate use of supervision and consultation within the social work practice setting.

S.W. 477 Field Practice Seminar

4 hours

Provides advanced professional knowledge which examines problems and issues of social work practice. The transitional role of the student moving from an undergraduate academic setting to the world of work and/or graduate study will be explored. Need for specific content not previously available to the student is arranged.

S.W. 487-488 Independent Study

2 or 4 hours each

Studies may be planned as extensions of, or separate from existing Social Work offerings.

S.W. 490 Senior Project 2-8 hours

Study will be directed in a specialized concentration of social work practice. Designed to allow the student to integrate both the field placement and academic experience.



The Directories

BOARD OF TRUSTEES

Officers of the Board

CHARLES D. BELL, *Chairman*

TODD H. BULLARD, *President*

ROBERT O. SEIDEWITZ, *Treasurer and Chief Business Officer*

JOHN E. COSTELLO, *Secretary*

ANN W. TROMBADORE, *Assistant Secretary*

TERM EXPIRES JUNE 1985

ALTON W. BEHM, M.D., 112 South Street, Chardon, Ohio

COURTNEY BURTON, Oglebay-Norton Company, 1100 Superior Avenue, Cleveland, Ohio

IVABELL HARLAN, 1143 Timberview Trail, Bloomfield Hills, Michigan

WILLIAM R. HOAG, West Elizabeth Lumber Co., 1 Chicago Avenue, Elizabeth, Pennsylvania

RODNEY B. HURL, M.D., 211 Stocksdale Drive, Marysville, Ohio

THOMAS P. JOHNSON, 1500 Oliver Building, Pittsburgh, Pennsylvania

WILLIAM L. MILLER, JR., The Christian Church (Disciples of Christ) in the Upper Midwest, 3300 University Avenue, Des Moines, Iowa

WILLIAM F. PORTER, 946 Park Boulevard, East Liverpool, Ohio

JOHN G. REDLINE, JR., Bank One Eastern Ohio, 1800 Franklin Street, Toronto, Ohio

TERM EXPIRES JUNE 1986

CHARLES D. BELL, 67 Seventh Street,
Wellsburg, West Virginia

ROBERT F. CORY, 420 Blackhawk Road,
Beaver Falls, Pennsylvania

WILLIAM E. LEWELLEN, U.S. Steel
Corporation, U.S. Steel Building, Pittsburgh,
Pennsylvania

ROBERT MACKENZIE, JR., 5 Duck Hook
Circle, River Hills Plantation, Clover, South
Carolina

ANN PRESTON, 1324-D Pelican Creek
Crossing, St. Petersburg, Florida

JOHN W. RENNER, 29942 Bolingbrook
Road, Pepper Pike, Cleveland, Ohio

WILLIAM S. RYAN, Edmondson Avenue at
Academy Road, Baltimore, Maryland

ANN W. TROMBADORE, 626 Watchung
Road, Bound Brook, New Jersey

ROBERT C. WETENHALL, McConnell,
Wetenhall & Co., Inc., 375 Park Avenue, New
York, New York

TERM EXPIRES JUNE 1987

MARSHALL L. BERKMAN, AMPCO-
Pittsburgh Corporation, 700 Porter Building,
Pittsburgh, Pennsylvania

EDWIN V. CLARKE, JR., Westinghouse
Electric Corporation, Gateway Center,
Pittsburgh, Pennsylvania

JAMES L. COLLINS, Picoma Industries,
Inc., Martins Ferry, Ohio

JOHN E. COSTELLO, 418 Washington
Avenue, Charleroi, Pennsylvania

MICHAEL J. KASARDA, R.D. 4, Box 65140,
Bellaire, Ohio

HARRY MARTENS, Commercial Union
Insurance Companies, One Beacon Street,
Boston, Massachusetts

EUGENE MILLER, United States Gypsum
Company, 101 South Wacker Drive, Chicago,
Illinois

G. OGDEN NUTTING, The Ogden
Newspapers, Inc., 1500 Main Street,
Wheeling, West Virginia

HAROLD R. WATKINS, Board of Church
Extension of the Christian Church (Disciples
of Christ), 110 South Downey Avenue,
Indianapolis, Indiana

FRANK L. WIEGAND, JR., 855 Academy
Place, Pittsburgh, Pennsylvania

Faculty Representative to the Board

DAVID J. JUDY, Bethany, West Virginia

Honorary Trustees

MERRITT J. DAVIS, 200 Sycamore Street,
Wellsburg, West Virginia

A. DALE FIER, 236 Inlet Way, Palm Beach
Shores, Florida

PERRY E. GRESHAM, Highland Hearth,
Bethany, West Virginia

PAUL A. NORTON, 20 Church Street, A-30,
Greenwich, Connecticut

CHARLES E. PALMER, 150 Royal Oak
Drive, Apt. 605, McKeesport, Pennsylvania

MALCOLM W. RUSH, 3096 Orchard Road,
Cuyahoga Falls, Ohio

JOSEPHINE SHEETS WICKERHAM, 7150
Estero Boulevard, Ft. Myers, Florida

Committees of the Board of Trustees

(The President of the College is an *ex officio*
member of all committees.)

EXECUTIVE (Elected)

Michael J. Kasarda, Chairman; Charles D.
Bell, John E. Costello, William R. Hoag,
Rodney B. Hurl, Thomas P. Johnson, G.
Ogden Nutting, William F. Porter, Ann C.
Preston, John G. Redline, Harold R. Watkins

**FISCAL AFFAIRS (Elected by Executive
Committee)**

William F. Porter, Chairman; Robert F.
Cory, John E. Costello, Michael J. Kasarda,
Eugene Miller, G. Ogden Nutting, (Charles
D. Bell, Robert O. Seidewitz, *ex officio*)

INVESTMENT (Elected)

Frank L. Wiegand, Jr., Chairman; Thomas
P. Johnson, William R. Hoag, William E.
Lewellen, Harold R. Watkins, (Charles D.
Bell, Robert O. Seidewitz, *ex officio*)

CAMPUS PLANNING

James L. Collins, Chairman; Alton W. Behm,
Marshall L. Berkman, John E. Costello,
William R. Hoag, Robert Mackenzie, Jr.

CHURCH RELATIONS

William L. Miller, Jr., Chairman; Ivabell
Harlan, Ann C. Preston, William S. Ryan,
Harold R. Watkins

DEVELOPMENT

Rodney B. Hurl, Chairman; Courtney
Burton, James L. Collins, Robert F. Cory,
William R. Hoag, Robert C. Wetenhall,
Frank L. Wiegand, Jr.

LONG RANGE PLANNING

James L. Collins, Chairman; John E.
Costello, Rodney B. Hurl, William E.
Lewellen, William L. Miller, Jr., Ann W.
Trombadore

NOMINATING

William F. Porter, Chairman; Alton W.
Behm, Charles D. Bell, Rodney B. Hurl,
Michael J. Kasara, Ann C. Preston

COLLEGE COMMUNITY

Ann Trombadore, Co-Chairman; John W.
Renner, Co-Chairman; Alton W. Behm,
Marshall L. Berkman, Robert F. Cory,
Ivabell Harlan, Rodney B. Hurl, Robert
Mackenzie, Jr., Ann C. Preston

ALUMNI COUNCIL MEMBERS 1984-85

GWENDOLYN DAVIS ALLEN, Bethany,
West Virginia

TRUDY LYNN BERKEY, Washington,
Pennsylvania

HARRISON BOLEN, Akron, Ohio

JUNE MONTGOMERY BOOHER,
Wellsburg, West Virginia

MARK CHERNENKO, Wellsburg, West
Virginia

CARYN TEUTSCH CHERNICKY, Bethel
Park, Pennsylvania

STEPHEN K. CHERNICKY, *President*,
Bethel Park, Pennsylvania

TERRY A. CRAIG, Canonsburg,
Pennsylvania

WILBUR H. CRAMBLET, JR., Bethany,
West Virginia

JOYCE DUMBAUGH, Weirton,
West Virginia

JOHN ERSKINE, Pittsburgh,
Pennsylvania
JUDITH A. FLYNN, Bethany, West Virginia
DONALD FORD, Warren, Ohio
MARJORIE SEABRIGHT GRIFFIN,
Wheeling, West Virginia
BENJAMIN GRIFFITH, Bethel Park,
Pennsylvania
VAL GUNDLING, Wheeling, West Virginia
JOHN HANIFORD, Washington,
Pennsylvania
JOYCE E. HARRY, Hubbard, Ohio
VERN HOLDEN, Wexford, Pennsylvania
WILLIAM KIEFER, Weirton, West
Virginia
J. HARRY LAMMERT, Pittsburgh,
Pennsylvania
DALE LAUGHNER, Beaver Falls,
Pennsylvania
S. DEAN LESIAK, Bay Village, Ohio
ROBERT L. MARTIN, Wheeling, West
Virginia
JOSEPH W. MAYERNICK, *Vice President*,
Weirton, West Virginia
JAMES P. O'ROARK, Beaver Falls,
Pennsylvania
L. JAY SMITH, West Bloomfield, Michigan
TIMOTHY STACK, Pittsburgh, Pennsylvania
JOHN R. TAYLOR, Bethany, West Virginia
KENNETH W. VALUSKA, Hudson, Ohio
DOROTHY FURBER WASSMANN, Mars,
Pennsylvania
TERRY ZABRUCKY, Springfield,
New Jersey

TRUSTEE MEMBERS, EX-OFFICIO

JAMES L. COLLINS, Wheeling, West
Virginia
ROBERT CORY, Beaver Falls, Pennsylvania
JOHN COSTELLO, Charleroi, Pennsylvania
RODNEY B. HURL, M.D., Marysville, Ohio
MICHAEL KASARDA, Bellaire, Ohio
WILLIAM E. LEWELLEN, Pittsburgh,
Pennsylvania

ADMINISTRATION

TODD H. BULLARD, **President**

ROBERT A. SANDERCOX, **Vice President/
Provost for College Advancement**

JOHN S. CUNNINGHAM, *Dean of
Admission*

RUTH L. WESTLAKE, *Director of Public
Information & Publications*

JERALD E. FUQUA, *Director of Church
Relations*

PENNY S. POIRIER, *Director of Alumni
Relations*

THOMAS H. STEIN, *Director of Admission*
KATHLEEN J. FAULKENBERRY,

*Assistant to Director of Public Information
and Publications*

CONRAD I. HINCKLEY, *Associate
Director of Admission*

RUSSELL N. ROGERSON, *Admission
Counselor*

JUDITH A. FLYNN, *Admission Counselor*

ROBERT C. NOLAN, **Vice President
for Development**

WM. DANIEL COBB, III, **Vice President
and Dean of Faculty**

JOSEPH M. KUREY, *Assistant Dean for
Academic Administration*

JOHN C. GIESMANN, *Registrar and
Director of Housing*

RUTH MARTIN JONES, *Assistant to the
Registrar*

JONAS BARCIAUSKAS, *Head Librarian*
TONI P. OLSHAN, *Reference Librarian*

RUSSELL J. COOK, *Director of Video and
Media Services*

DAVID M. HUTTER, *Director of Athletics*
JEAN MARIE GIARRUSSO, *Director*

of Women's Athletics
MICHAEL A. CALABRESE, *Athletic*

Trainer
EDWIN GOLDIN, *Director of the*

Center for Academic Computing
LEONORA BALLA CAYARD, *Coordinator*

of the International Education Programs
LARRY E. GRIMES, *Director of Liberal*

Studies
ANN C. SHELLY, *Director of Teacher*

Preparation Programs

JOHN S. CUNNINGHAM, **Dean of Students
and Admission**

DARLINE B. NICHOLSON, **Acting Dean of
Students and Director of Renner Union**

JOHN C. GIESMANN, *Director of Housing
and Registrar*

CHRISTINE OSSMAN, *Assistant Dean of
Students and Coordinator of Freshman
Residence Halls*

THEODORE W. BUNNELL, *Director
of Financial Aid*

BETH DAMEIER, *Associate Director
of Financial Aid and Coordinator of
Financial Aid Services for Current
Students*

ANNE ZALACCA, *Assistant Director
of Financial Aid and Coordinator of
Financial Aid Services for Incoming
Students*

JOANNE SYKES, R.N., *Supervisor of
the Infirmary*

JAMES COMERCI, *College Physician*
BASIL P. PAPADIMITRIOUS, M.D.,

College Physician
WILLIAM B. ALLEN, *College Chaplain*

FATHER LEWIS F. GAETANO,
Roman Catholic Chaplain

DANIEL M. LOWY, *Jewish Chaplain*
W. CARROLL THORN, *Episcopal Chaplain*

DOUGLAS SMITH, *Assistant Chaplain*
GRETCHEN ANAPLE, *Administrative*

Assistant to the Dean of Students

ROBERT O. SEIDEWITZ, **Treasurer
and Chief Business Officer**

JOSEPH M. KUREY, *Associate Business
Officer*

THOMAS A. FERRIS, *Director of
Physical Plant*

SHIRLEY M. JACOB, *Assistant
Treasurer and Accountant*

NANCY AULT, *Manager of the
Leadership Center*

GEORGE S. BAUMAN, JR., *Manager
of College Stores*

LYNN E. QUEEN, *Director of Data
Processing*

RICHARD PIKE, *Director of
Dining Service*

BARBARA GUTHRIE-MORSE, **Dean of
The Leadership Center and Executive
Assistant to the President for
External Programs**

PAULINE R. NELSON, *Director of
Continuing Education*

**Office of Career and Professional
Development:**

ZOILA AIRALL, *Assistant to the Dean for
Career and Professional Development and
Coordinator of Counseling Services*

GWENDOLYN ALLEN, *Coordinator of
Placement Services and Campus
Employment*

Summer Programs

Leadership Center Programs

THE FACULTY

TODD H. BULLARD, *President of the College on the M.M. Cochran Foundation and Professor of Political Science.* (1980). Bethany College; B.A., West Liberty State College; M.A., West Virginia University; Ph.D., University of Pittsburgh.

WM. DANIEL COBB III, *Vice President and Dean of Faculty.* (1977). A.B., Transylvania University; B.D., S.T.M., Yale University; A.M., Ph.D., The University of Chicago.

ROBERT A. SANDERCOX, *Vice President and Provost for College Advancement.* (1957). B.A., Bethany College; M.Div., Yale University; University of Buffalo; West Virginia University.

JOHN S. CUNNINGHAM, *Dean of Students.* (1967). B.S., Slippery Rock State College; M.Ed., Kent State University; Ed.D., West Virginia University.

Emeriti

FORREST H. KIRKPATRICK, *Dean of Students and Professor Emeritus* (1927-1952) and *Adjunct Professor of Economics and Business.* (1952-1958; 1970). University of Dijon; B.A., Bethany College; M.A., and Prof. Dipl., Columbia University; University of Pittsburgh; University of London; University of Pennsylvania; University of Cambridge; LL.D., Bethany College; LL.D., College of Steubenville; LL.D., Drury College; H.H.D., Wheeling College.

JOHN J. KNIGHT, *Professor of Physical Education Emeritus.* (1930-1970). B.A., West Virginia Wesleyan College; M.A., Ohio State University; University of Michigan.

BRADFORD TYE, *Associate Professor of Mathematics Emeritus.* (1943-1973). B.S., Alma White College; M.S., New York University; Rutgers University; Columbia University; University of Pittsburgh.

GEORGE K. HAUPTFUEHRER, *Professor of Music Emeritus.* (1945-1977). B.A., B.M., Friends University; M.A., University of Kansas; Pittsburgh Musical Institute; Juilliard School of Music; Indiana University.

S. ELIZABETH REED, *Associate Professor of Physical Education Emeritus.* (1945-1975). B.A., Muskingum College; M.Ed., University of Pittsburgh; University of Wisconsin; New York University; University of Wyoming; University of Southern California; University of Michigan.

HELEN LOUISE MCGUFFIE, *Professor of English Emeritus.* (1948-1983). B.A., Bethany College; M.A., University of Pittsburgh; Ph.D., Columbia University; Oxford University.

MARGARET MATHISON, *Professor of Education Emeritus.* (1951-1974). B.A., M.Litt., University of Pittsburgh; University of Southern California; Pennsylvania State University; Ohio State University.

J. DANIEL DRAPER, *Professor of Chemistry Emeritus.* (1951-1984). B.S., Franklin and Marshall College; Ph.D., University of Maryland; Michigan State University.

WINIFRED WEBSTER, *Dean of Women and Instructor in English Emeritus.* (1952-1960). B.A., University of North Dakota; M.A., Columbia University.

PERRY E. GRESHAM, *President* (1953-1972) and *President Emeritus and Distinguished Professor.* (1972-). B.A., B.D., Texas Christian University; LL.D., Texas Christian University; Litt.D., Culver-Stockton College; L.H.D., Chapman College; Ed.D., Transylvania University; University of Chicago; Columbia University; Litt.D., University of Cincinnati; Litt. D., Findlay College; Pd.D., Youngstown University; D.B.A., Lawrence Institute of Technology; H.H.D., Bethany College; J.D., William Woods College; Litt.D., West Virginia University; L.H.D., Concord College; Ed.D., Rio Grande College; LL.D., Alderson-Broadbudd College; LL.D., Quincy College.

SUSAN W. HANNA, *Instructor in Health and Physical Education Emeritus.* (1957-1977). B.A., Bethany College; Marjorie Webster School of Physical Education.

HSIOH-REN WEI, *Professor of Physics and Public Affairs Emeritus.* (1963-1972). B.A., University of Nanking; Ph.D., University of Chicago.

THEODORE R. KIMPTON, *Assistant Professor of Foreign Languages Emeritus.* (1965-1974). B.S., United States Military Academy; M.A., University of Maryland; Catholic University; Laval University.

DOROTHY HUESTIS, *Assistant Professor of Education Emeritus.* (1969-1976). B.A., M.A., Indiana University.

CHARLES E. HALT, *Professor of Economics Emeritus.* (1969-1977). B.S., Slippery Rock State College; M.Ed., Pennsylvania State University; Ph.D., Syracuse University; University of Pittsburgh.

OLIVER MANNING, *Artist-in-Residence Emeritus.* (1972-1982). B.M., Louisiana State College; M.M., Cincinnati College Conservatory of Music.

Professors

WILLIAM L. YOUNG, *Professor of History and Political Science and Head of the History Department.* (1950). B.A., Bethany College; M.A., Ph.D., Ohio State University; Columbia University.

JOHN R. TAYLOR, *Professor of English.* (1955). B.A., Bethany College; M.A., Princeton University; University of Akron; University of Kansas; University of Birmingham, England; University of Edinburgh; Oxford University.

JAMES W. CARTY, JR., *Professor of Communications*. (1959).
B.A., Culver-Stockton; B.D., University of Chicago; M.S., Northwestern University; D.D., Evangelical Seminary of Puerto Rico; University of Oklahoma; George Peabody College; Scaritt College; Saltillo (Mexico) State Teachers College; Diploma from National University of Nicaragua; Diploma from University of San Carlos; Ohio University; University of Denver; Universidad Iberoamericana.

RICHARD B. KENNEY, *T. W. Phillips Professor of Old Testament Literature and Head of the Department of Religious Studies*. (1964).

B.A., Washington University; B.D., M.A., Ph.D., Yale University; Basel University; McGill University; University of Tübingen; The University of Chicago.

ROBERT E. MYERS, *Professor of Philosophy and Head of the Department*. (1964).

B.A., Bethany College; M.Div., Texas Christian University; Ph.D., Ohio State University.

GARY E. LARSON, *Professor of Biology*. (1964).

B.S., M.S., New York State University, Albany; Ph.D., Rutgers University; Albany Medical College.

HIRAM J. LESTER, *Professor of Religious Studies*. (1965).

Johnson Bible College; B.A., B.D., Phillips University; M.A., Ph.D., Yale University.

JOHN U. DAVIS, *Professor of Education*. (1966).

B.A., Bethany College; M.A., Ed.D., Columbia University; University of Nebraska; Oxford University; West Virginia University.

DAVID J. JUDY, *Professor of English and Theatre and Head of the Fine and Applied Arts Department*. (1967).

B.A., Denison University; M.A., Western Reserve; Ph.D., West Virginia University; University of Mexico; Oxford University.

STANLEY L. BECKER, *Professor of Computer Science and Philosophy*. (1968).
B.S., New York State College of Forestry; Ph.D., University of Wisconsin.

J. TREVOR PEIRCE, *Professor of Psychology and Head of the Department*. (1969).

B.A., Princeton University; Ph.D., University of California.

ALBERT R. BUCKELEW, JR., *Professor of Biology and Head of the Department*. (1969).

B.S., Fairleigh Dickinson University; Ph.D., University of New Hampshire.

LARRY E. GRIMES, *Professor of English, Head of the Department, and Director of Liberal Studies*. (1970).

B.A., Bethany College; B.D., Yale Divinity School; Ph.D. Emory University.

LEONORA BALLA CAYARD, *Professor of Foreign Languages, Head of the Department and Coordinator of International Education Programs*. (1970).

Ph.D., Marburg University; Yale University.

DAVID T. BROWN, *Professor of Mathematics*. (1974).

B.A., Ottawa University; M.A., Ph.D., Syracuse University; University of Pittsburgh.

DAVID M. HUTTER, *Professor of Physical Education, Head of the Department, and Director of Athletics*. (1976).

B.S., M.S., Ohio University; Ph.D., Ohio State University.

EDWIN GOLDIN, *Professor of Physics, Head of the Department, and Director of Academic Computing*. (1981).

B.A., Temple University. M.S., Ph.D., Polytechnic Institute of New York.

HAROLD C. SHAVER, *Professor of Communications and Head of the Department*. (1982).

B.A., Muskingum College; M.A., Ph.D., Syracuse University.

ALBERT J. OSSMAN, JR., *Professor of Politics and Public Policy, Head of the Department, and Director of Public Affairs Programs*. (1982).

A.B., M.A., Ph.D., Syracuse University.

HAROLD E. HAYWARD, *Visiting Professor of Management*. (1984).

B.Litt., M.Ed.Ad., University of New England; M.B.A., University of New South Wales; M.A., University of Sidney.

Associate Professors

JAMES E. ALLISON, *Associate Professor of Mathematics and Head of the Department*. (1964).

B.S., Bethany College; M.A., West Virginia University; Texas Christian University.

JOHN W. LOZIER, *Associate Professor of History*. (1964).

B.A., University of Colorado; M.A., Ph.D., Ohio State University; Massachusetts Institute of Technology.

JOHN D. DAVIS, *Associate Professor of Economics and Business*. (1965).

B.A., American International College; M.A., University of Connecticut; West Virginia University; The University of Chicago.

W. RANDOLPH COOEY, *Associate Professor of Economics and Business*. (1966).

B.A., Bethany College; M.A., West Virginia University; Mississippi State University.

ANTHONY L. MITCH, *Associate Professor of English*. (1967).

B.A., Cornell University; M.A., St. John's University; New York University.

WALTER L. KORNOWSKI, *Associate Professor of Art*. (1967).

B.F.A., Rochester Institute of Technology; M.S., State University College of Buffalo; M.F.A., West Virginia University.

PAULINE R. NELSON, *Associate Professor of Foreign Languages and Director of Continuing Education*. (1971).

B.A., Upsala College; M.A., Ph.D., University of Pittsburgh.

MILTON R. SMITH, JR., *Associate Professor of Chemistry*. (1972).

B.S., Sul Ross State University; Ph.D., Texas A & M University; Ohio State University.

T. GALE THOMPSON, *Associate Professor of Psychology*. (1974).

B.A., M.A., Ph.D., University of Missouri.

JOHN H. HULL, *Associate Professor of Psychology*. (1976).

B.S., Alma College; M.A., Ph.D., Kent State University.

LYNN ADKINS, *Associate Professor of Sociology and Social Work and Head of the Department*. (1978).

A.B., Marshall University; M.S.W., West Virginia University; Ph.D., University of Pittsburgh; London School of Economics and Social Science.

ANN C. SHELLY, *Associate Professor of Education, Head of the Department, and Director of Teacher Preparation Programs*. (1978).

B.A., M.A., Ph.D., Michigan State University.

EDWIN STECKEL, *Associate Professor of Communications and Resident Fellow in Broadcasting*. (1983).

A.B., M.S., Syracuse University.

Assistant Professors

JOHN J. MCGOWAN, *Assistant Professor of Physical Education*. (1980).

B.S., Manhattan College; M.S., Springfield College.

MARC A. OLSHAN, *Assistant Professor of Sociology and Social Work*. (1981).

B.S., Cornell University; M.A., Columbia University; Ph.D., Cornell University.

HAROLD M. CURNUTTE, *Assistant Professor of Economics and Business*. (1981).

B.A., M.S., Ohio University.

I. HOWARD SEILER, *Assistant Professor of Education*. (1981).

B.A., M.A., Ph.D., Michigan State University.

WALLACE B. NEEL, *Assistant Professor of Physical Education*. (1982).

B.S., M.S., Ohio University.

ANNIE PREIS, *Assistant Professor of Education*. (1982).

B.A., M.A., Ph.D., University of Pittsburgh.

JACQUELINE DeLAAT, *Assistant Professor of Political Science and Public Administration*. (1982).

B.A., The State University of Iowa; M.A., University of Minnesota; Ph.D., University of Pittsburgh.

MARY ELLEN KOMOROWSKI, *Assistant Professor of Mathematics and Education*. (1982).

B.A., M.A., Ed.D., West Virginia University; The American University of Beirut.

ALBERT C. SKAGGS, *Assistant Professor of Communications*. (1982).

B.A., University of Alabama; M.A., University of Missouri.

RUSSELL J. COOK, *Assistant Professor of Communications and Director of Video and Media Services*. (1983).

B.F.A., M.A., Miami University.

ROBERT A. PAYSEN, *Assistant Professor of Chemistry*. (1983).

B.A., College of St. Thomas; Ph.D., University of Tennessee.

JONAS BARCIAUSKAS, *Head Librarian and Assistant Professor of Religious Studies*. (1984).

B.A., M.S.L.S., Columbia University; M.A., Pacific School of Religion; Ph.D., Fordham University.

DAVID M. KOESTER, *Assistant Professor of Biology*. (1984).

B.A., Miami University; Ph.D., University of Delaware.

JAFAR AMIRZADEH, *Assistant Professor of Physics and Mathematics*. (1984).

B.Sc., University of Tabriz; M.Sc., University of Tehran; M.S., Michigan State University; Ph.D., West Virginia University.

Instructors

JAMES A. ZALACCA, *Instructor in Physical Education*. (1982).

A.A.S., Genesee Community College; B.S., Brockport State University; M.A.T., DePauw University.

JEAN MARIE GIARRUSSO, *Instructor in Physical Education and Coordinator of Women's Athletics*. (1982).

B.S., University of New Hampshire; M.S., University of Massachusetts.

NANCY H. CARNEY-DeBORD, *Instructor in Physical Education*, (1982).

B.A., Denison University; Ohio State University; M.A., Kent State University.

JAMES M. MEYER, *Instructor in Physical Education*. (1982).

B.S., M.S., University of Akron.

DOUGLAS A. SWITZER, *Instructor in Communications*. (1984).

B.A., Muskingum College; M.A., Bowling Green State University.

Adjunct Faculty and Lecturers

ALBERT R. DeVAUL, *Adjunct Assistant Professor of Music and Program Director*. (1964).

B.A., West Liberty State College; M.M., West Virginia University; Carnegie-Mellon University.

MARJORIE E. CARTY, *Lecturer in Foreign Languages*. (1965).

Ph.B., University of Chicago; Clark University; Saltillo (Mexico) State Teachers College; University of Nicaragua; Bethany College; West Virginia University; University of Puerto Rico; Universidad Iberoamericana.

ROBYN R. COLE, *Adjunct Assistant Professor of English*. (1968).

B.A., University of Maryland; M.A., University of Georgia; Ohio University.

WILLIAM B. ALLEN, *Chaplain of the College*. (1970).

B.A., Bethany College; M.Div., Yale Divinity School; D.Min., School of Theology at Claremont.

RUTH L. WESTLAKE, *Lecturer in Communications*. (1975).

B.A., Kent State University; Ohio University.

DANIEL M. LOWY, *Lecturer in Religious Studies*. (1979).

A.B., New York University; M.H.L., Hebrew Union College (New York); D.D., Hebrew Union College (Cincinnati).

JENNIFER COFFIELD, *Lecturer in Theatre*. (1980). B.F.A., West Virginia University; M.A., Southern Illinois University.

JEFFREY SCOTT NUGENT, *Lecturer in Music*. (1980).

B.A., West Liberty State College.

DOMINICK A. DeFILIPPIS, *Adjunct Assistant Professor of Foreign Languages*. (1981).

B.A., Georgetown University; M.A., New York University; Ph.D., University of Pittsburgh.

STEVEN KRUSE, *Lecturer in Music*. (1981). B.M., M.M., Manhattan School of Music; Ball State University.

TONI P. OLSHAN, *Reference Librarian and Lecturer in Library Science*. (1983).

B.S., M.S., Cornell University.

GARY H. KAPPEL, *Adjunct Instructor in Theatre and History*. (1983).

B.A., Bethany College; M.A., West Virginia University.

STEVE T. GRAMMEN, *Lecturer in Accounting*. (1983).

B.A., Washington and Jefferson College; C.P.A.

PETER W. JAWORSKI, *Lecturer in Accounting*. (1984).

B.S., Wheeling College; C.P.A.

DEBORAH A. KENNEDY, *Lecturer in Accounting*. (1984).

ADVISORS

For Freshmen

William B. Allen
James E. Allison
Albert R. Buckelew, Jr.
David T. Brown
Edwin Goldin
Larry E. Grimes
David M. Hutter
David J. Judy
Gary Kappel

Hiram J. Lester
John W. Lozier
Marc Olshan
Toni P. Olshan
J. Trevor Peirce
Harold C. Shaver
Edwin Steckel
T. Gale Thompson

For Fields of Concentration

Accounting Harold M. Curnutte
Biology Albert R. Buckelew, Jr.
Chemistry Milton R. Smith, Jr.
Communications Harold C. Shaver
Computer Science James E. Allison
Economics and Business John D. Davis
Education Ann C. Shelly
English Larry E. Grimes
Fine and Applied Arts David J. Judy
Foreign Languages Leonora Balla Cayard
Health Science Gary E. Larson
History William L. Young
Interdisciplinary
Studies Larry E. Grimes
Mathematics James E. Allison
Philosophy Robert E. Myers
Physical Education David M. Hutter
Physics Edwin Goldin
Politics and
Public Policy Albert J. Ossman, Jr.
Psychology J. Trevor Peirce
Religious Studies Richard B. Kenney
Science Applications Edwin Goldin
Sociology and
Social Work Lynn Adkins

For Career Interests

Advertising James W. Carty, Jr.
Dentistry Gary E. Larson
Drama David J. Judy
Engineering Edwin Goldin
Law Albert J. Ossman, Jr.
Medicine Gary E. Larson
Ministry Richard B. Kenney
Newspaper James W. Carty, Jr.
. Albert C. Skaggs
Public Relations Harold C. Shaver
Radio Harold C. Shaver
Recreation Leadership David M. Hutter
Social Work Lynn Adkins
Teaching Ann C. Shelly
Television Harold C. Shaver
Veterinary Medicine Gary E. Larson

For Professional Core Program

Albert J. Ossman, Jr.

For Special Services

Campus Employment Gwendolyn Allen
Counseling Zoila Airall
Foreign Students Gary E. Larson
Zoila Airall
Graduate Fellowships
and Scholarships Robert E. Myers
Ministerial Training
Awards Robert A. Sandercox
Social Security and
Veterans Benefits John C. Giesmann
Social and Recreational
Activities Darline B. Nicholson
Testing Zoila Airall
Undergraduate
Scholarships Theodore W. Bunnell
Beth Dameier
Career Counseling Zoila Airall
Gwendolyn Allen

FACULTY COMMITTEES

Student members are appointed annually to many of the following committees by the President of the College and upon the recommendation of the Student Board of Governors.

ADMISSION

James E. Allison, *Convener*; Lynn Adkins, John S. Cunningham, John D. Davis, David M. Hutter; David J. Judy, Richard B. Kenney, Milton R. Smith, Jr., Thomas H. Stein.

ATHLETICS

John U. Davis, *Convener*; Nancy H. Carney-DeBord, Jean Marie Giarrusso, John C. Giesmann, David M. Hutter (*ex officio*), John McGowan, Edwin Steckel.

CAMPUS MEDIA

Harold C. Shaver, *Convener*; James W. Carty, Jr., Russell J. Cook, John U. Davis, Jean Marie Giarrusso, Walter L. Kornowski, James M. Meyer, Robert O. Seidewitz, Albert C. Skaggs, Edwin Steckel, Ruth L. Westlake.

CAREER ADVISEMENT

Zoila Airall, *Convener*; Lynn Adkins, John S. Cunningham, Barbara Guthrie-Morse, Gary E. Larson, Robert E. Myers, Darline B. Nicholson, Albert J. Ossman. **Graduate School:** Robert E. Myers, *Convener*; Stanley L. Becker, W. Randolph Cooley, Marc A. Olshan, Robert A. Paysen, Annie Preis. **Health Professions:** Gary E. Larson, *Convener*; Albert R. Buckelew, Jr., J. Trevor Peirce, Milton R. Smith, Jr. **Pre-Law:** Albert J. Ossman, *Convener*; Leonora Balla Cayard, Jacqueline DeLaat, John W. Lozier, Anthony L. Mitch, William L. Young. **Social Work:** Lynn Adkins, *Convener*; Zoila Airall, Jean Marie Giarrusso, Marc A. Olshan, Annie Preis, Ann C. Shelly, T. Gale Thompson, James A. Zalacca.

COMPUTER ADVISORY

Edwin Goldin, *Convener*; James E. Allison, Stanley L. Becker, David T. Brown, Russell J. Cook, Harold M. Curnutte, Joseph M. Kurey, John J. McGowan, Anthony L. Mitch, Robert A. Paysen, J. Trevor Peirce, Lynn Queen, Robert O. Seidewitz, Milton R. Smith, Jr.

CURRICULUM

Wm. Daniel Cobb, *Convener*; James E. Allison, John C. Giesmann (*ex officio*), Edwin Goldin, Larry E. Grimes, Barbara Guthrie-Morse (*ex officio*), David M. Hutter, Joseph M. Kurey, Anthony L. Mitch, Robert E. Myers, Albert J. Ossman, Harold C. Shaver, Ann C. Shelly.

EXTERNAL EDUCATION

Albert J. Ossman, *Convener*; William B. Allen, W. Randolph Cooley, Barbara Guthrie-Morse, Mary Ellen Komorowski, Walter L. Kornowski, Joseph M. Kurey, Hiram J. Lester, Anthony L. Mitch, Wallace B. Neel, Pauline R. Nelson, Darline B. Nicholson, Robert A. Sandercoc, Harold C. Shaver, Ruth L. Westlake.

FACULTY BUDGET

Edwin Goldin, *Physical and Life Sciences* (1986); John D. Davis, *Social Sciences* (1985); David J. Judy, *Representative to the Board of Trustees*; Albert J. Ossman, *At-Large* (1987).

FACULTY DEVELOPMENT

T. Gale Thompson, *Convener*; Nancy H. Carney-DeBord, Russell J. Cook, Harold M. Curnutte, Jacqueline DeLaat, John J. McGowan, Pauline R. Nelson, Marc A. Olshan, I. Howard Seiler, Albert C. Skaggs.

FACULTY PERSONNEL

James E. Allison, *Physical and Life Sciences* (1987), *Convener*; John U. Davis, *At-Large* (1985); John H. Hull, *At-Large* (1986); David J. Judy, *Humanities* (1986); Ann C. Shelly, *Social Sciences* (1985).

FACULTY WELFARE

David T. Brown (1985), *Convener*; Leonora Balla Cayard (1986), Jean Marie Giarrusso (1987), John H. Hull (1987), Milton R. Smith, Jr. (1985).

GANS AWARD

Milton R. Smith, Jr., *Convener*; Albert R. Buckelew, Edwin Goldin, John H. Hull, Gary E. Larson, Robert A. Paysen, J. Trevor Peirce.

HONORS

Robert E. Myers, *Convener*; James W. Carty, Jr., John S. Cunningham, Richard B. Kenney, Darline B. Nicholson, Robert A. Sandercoc, Ann C. Shelly, John R. Taylor, T. Gale Thompson, William L. Young.

INTERDISCIPLINARY STUDIES

Larry E. Grimes, *Convener*; James E. Allison, Stanley L. Becker, Jacqueline DeLaat, Hiram J. Lester, Marc A. Olshan, Robert A. Paysen, Albert C. Skaggs, T. Gale Thompson, James A. Zalacca.

INTERNATIONAL EDUCATION

Leonora Balla Cayard, *Convener*; Zoila Airall, James W. Carty, Jr., W. Randolph Cooley, Mary Ellen Komorowski, Gary E. Larson, John W. Lozier, Pauline R. Nelson, Albert J. Ossman, Annie Preis, William L. Young.

POLICY APPEALS

Wm. Daniel Cobb, *Convener*; Albert R. Buckelew, Jr., Leonora Balla Cayard, John S. Cunningham, John D. Davis, John C. Giesmann, Richard B. Kenney, Joseph M. Kurey, John J. McGowan, Darline B. Nicholson, I. Howard Seiler.

PRACTICUM REVIEW

John H. Hull, *Convener*; Albert R. Buckelew, Leonora Balla Cayard, Larry E. Grimes, David J. Judy, Hiram J. Lester, John J. McGowan, Pauline R. Nelson, Harold C. Shaver, T. Gale Thompson.

RELIGIOUS LIFE

John H. Hull, *Convener*; William B. Allen, James W. Carty, Jr., John C. Giesmann, Richard B. Kenney, Mary Ellen Komorowski, Robert E. Myers, Wallace B. Neel, John R. Taylor.

STUDENT LIFE

John S. Cunningham, *Convener*; Nancy H. Carney-DeBord, Harold M. Curnutte, John H. Hull, Walter L. Kornowski, John W. Lozier, James M. Meyer, Wallace B. Neel, I. Howard Seiler, Edwin Steckel, James A. Zalacca; (*ex officio members*): George Bauman, Theodore W. Bunnell, John C. Giesmann, Larry E. Grimes, Darline B. Nicholson, Christine Ossman, Joanne Sykes.

TEACHER EDUCATION

Ann C. Shelly, *Convener*; Lynn Adkins, David T. Brown, Albert R. Buckelew, John U. Davis, David M. Hutter, David J. Judy, Mary Ellen Komorowski, Pauline R. Nelson, Annie Preis, I. Howard Seiler.

COLLEGE COUNCIL AND FACULTY SENATE

The College Council advises the President of the College on matters of student relations and the impact of policies and practices on student life. Its membership is comprised of senior administration and faculty who are designated by the President, and of presidents of fraternities, sororities and house associations. The Dean of Students chairs the Council.

The Faculty Senate discuss issues regarding the educational programs of the College and advises the President of academic concerns. Membership includes all department heads, full professors, executive officers, and three elected faculty members. Elected members for 1984-1985 are *Jacqueline DeLaat*, *Marc A. Olshan*, and *Annie Preis*. The Dean of the Faculty chairs the Senate.

Index

A

Academic Advisor	23
Academic Common Market	24
Academic Computer Center	27
Academic Procedures	39
Academic Programs	19
Accounting Courses	45
Accreditation	7
Achievement Recognition	33
Adjunct Faculty	117
Administration	113
Admission	11
Advanced Placement	12
Advisors	117
Aid	15
Alumni Council Membership	112
Alumni Field House	27
Application	11, 12
Application Fee	12
Art Courses	73
Assets of the College	26
Assistant Professors	116
Associate Professors	115
Astronomy	46
Athletics	31
Attendance Policy	40
Awards	35

B

Benedum Commons	27
Bethany House	27
Bethany Profile	5
Biology Courses	47
Board, Cost of	15
Board of Trustees	111
Breakage Deposit	16
Business and Economics Courses	56

C

Calendar	2
Campus Map	8, 9
Career and Professional Development	24
Career Interest Advisors	117
Center for Academic Computing	27
Change of Schedule	40
Change in Regulations	41
Chemistry Courses	49
Chief Business Officer	113
Christian Church (Disciples of Christ)	5
Classification of Students	40
Class Attendance Policy	40
Cochran Hall	26
College Life	29
College Council	118
Commencement Hall	26
Committees, Board of Trustees	112
Committees, Faculty	118
Communications Courses	51
Communications Design Courses	53
Community College Graduates	11
Comprehensive Charges	15
Comprehensive Examinations	22
Computer Science Courses	54
Course Descriptions	43
Course Load	39
Course Offerings	39
Course Index	42
Cramblet Hall	26
Cross-Listed Courses	39

D

Dean of Faculty	113
Dean of Leadership Center	113
Dean of Students	113
Dean's List	33
Degrees	20
Design Courses	73
Directories	111

E

Early Admission	12
Economics and Business Courses	56
Educational Resources	26
Education Courses, Programs	59
Emeriti Faculty	114
Endowment Funds	26
English Courses	67
Expenses	15
External Programs	25

F

Faculty	114
Faculty Committees	118
Faculty Senate	118
Fees, Special	16
Field of Concentration	20
Field of Concentration Advisors	117
Financial Aid	15
Fine and Applied Arts Courses	72
Fine and Applied Arts Fees	16
Foreign Language Courses	75, 78
Foreign Students	13
Founding of the College	5
Fraternal Life	29
French Courses	75
Freshman Advisors	117
Freshman Interdisciplinary Lecture	23, 43
Freshman Program	23
Freshman Seminars	23, 44
Freshman Studies Courses	44

G

General Sciences	79
Geography	79
German Courses	76
Goals of the College	6
Grace Phillips Johnson Visual Arts Center	26
Grading System	39
Graduation Honors	33
Graphics, Communication Design Courses	73, 79
Greek Courses	78
Gresham House	27

H

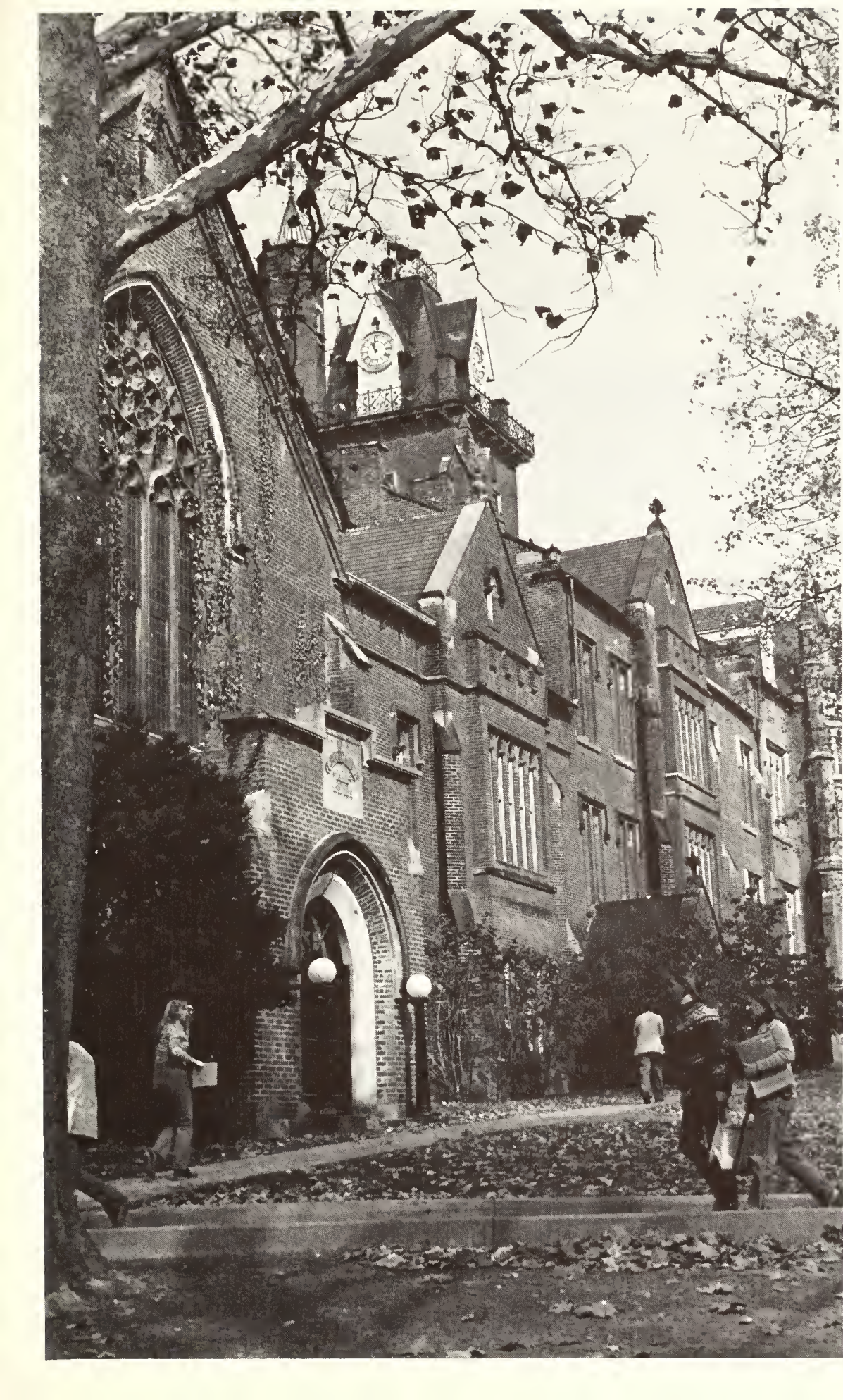
Harder Hall	27
Health Insurance, Cost of	15
Health Science	80
Heuristics	80
History Courses	81
Honorary Trustees	112
Honor Societies	34

I		O		S	
Independent Study	39	Oglebay Hall	26	Scholarships	33
Instructors	117	Old Main	26	Science Applications	106
Intercollegiate Athletics	31	Overseas Program Fees	16	Senior Comprehensive	
Interdisciplinary Studies		Overseas Study Offerings	25	Examinations	22
Courses	84	Oxford Study Program	25	Senior Fellowships	33
Intramurals	31	P		Senior Project	22
Invalidation of Credits	41	Paris Sorbonne Program	25	Social Life	29
J		Payment of Student Accounts	17	Social Sciences	106
January Term	2	Payment Plans	17	Social Work Courses	109
L		Pendleton Heights	27	Sociology Courses	108
Leadership Center	27	Perspectives Program	21	Spanish Courses	77
Lecturers	117	Phillips Hall	29	Special Education	66
Leisure Studies	91	Phillips Library	27	Special Examinations	40
Library	27, 85	Philosophy Courses	88	Special Fees	16
Literary Studies	76, 78	Physical Education Courses	90	Special Services Advisors	117
M		Physics Courses	95	State Government Study	24
Madrid Study Program	25	Policy Appeals Board	41	Steinman Fine Arts Center	26
Map of the Campus	8, 9	Politics and Public Policy		Student Board of Governors	29
Mathematics Courses	86	Courses	98	Student Drawing Account	17
Matriculation Fee	12	Practicum Program	23	Student Government	29
Media Center	27	Pre-Professional Study		Student Health Services	31
Media, Student	30	Programs	19	Student Life	29
Memberships, College	7	President	113	Student Regulations	30
Millson Center	27	Probation	40	T	
Music Courses	73	Professional Core Advisors	117	Theatre Courses	74
N		Professional Core Program	19, 43	Three-Dimensional Art	73
Natatorium	27	Professional Education	60	Transcript of Records	41
		Professors	114	Transfers	11
		Provost for College		Treasurer	113
		Advancement	113	Tubingen Study Program	25
		Psychology Courses	100	Tuition	15
		Publications, Student	30	Two-Dimensional Art	73
		R		V	
		Readmission	12	Visiting Bethany	13
		Recognition Awards	33	W	
		Recreation	31	Washington Semester	24
		Refunds	17	Withdrawals	17, 41
		Registration Deposit	12	Work Internships	24
		Regulation Changes	41	Writing Proficiency	
		Religious Life	30	Requirement	23
		Religious Studies Courses	103		
		Renner Union	27		
		Requirements for Degree	20		
		Residence Life	29		
		Residence Requirement	23		
		Richardson Hall of Science	26		
		Room, Cost of	15		

Bethany

College Bulletin 1985-1986





Bethany College Bulletin 1985-1986

Table of Contents

Bethany Profile	5
Admission to the College	11
Expenses, Aid	15
Academic Programs	19
College, Student Life	29
Scholarships, Recognition	
Awards	33
Academic Procedures	39
Course Descriptions	43
The Directories	111
Index	119

Vol. LXXVIII No. 3
August 1985
(USPS 052-420)

Second class postage paid at Bethany,
West Virginia 26032. Published five
times a year, February, April, July,
August and October by Bethany
College, Bethany, West Virginia.

College Calendar 1985-1986

The Bethany calendar consists of two 15-week semesters and a four-week voluntary interim session in January. The fall semester is from September to before Christmas. The spring semester is from February through May. Some courses are offered over the full semester while others are for the first or second half of a semester. This division provides flexibility for students to do off-campus study and internships.

The four weeks in January are an opportunity for students to elect for use in intensive study on campus or for off-campus work. Two four-week summer terms and an 11-week summer independent study period are offered.

First Semester

August
Aug. 31–Sept. 1 Saturday–Sunday
Orientation and evaluation for new students

September
2 Monday
Registration
3 Tuesday
Classes begin for all students
9 Monday
Last day for re-adjustment of schedules without academic and financial penalty; last day to add a course
12 Thursday
Formal Convocation
16 Monday
Last day to determine credit/no credit

October
12 Saturday
Homecoming
21 Monday
Last day of classes for first-half of semester
21–22 Monday–Tuesday
Final exams for first-half semester courses
25 Friday
NO CLASSES; mid-term grades are due
28 Monday
Writing Qualification Test for Freshman Seminars

November
2 Saturday
Parents' Day
9 Saturday
Board of Trustees Meeting
18–22 Monday–Friday
Registration for second semester
22 Friday 4 p.m.
Thanksgiving vacation begins

December
2 Monday 8 a.m.
Thanksgiving vacation ends
17 Tuesday
Last day of first-semester classes
18 Wednesday
Reading Day
19–21 Thursday–Saturday
Final exam period
23 Monday
Final grades are due

January Term (January 6–31)

January
27–28 Monday–Tuesday
Senior Comprehensive Exams (Written)
29–Feb. 1 Wednesday–Saturday
Senior Comprehensive Exams (Oral)

Second Semester

February
2 Sunday
Registration for all students and Diagnostic Writing Test for all transfers and readmissions
3 Monday
Classes begin for all students
7 Friday
Last day for re-adjustment of schedules without academic and financial penalty; last day to add a course
13 Thursday
Formal Convocation
14 Friday
Last day to determine credit/no credit

March
6 Thursday
Founder's Day
13 Thursday
Writing Qualification Test (Sophomores and Juniors)
19–20 Wednesday–Thursday
Final exams for first-half semester courses
21 Friday
Last day of classes for first-half semester courses
21 Friday 4 p.m.
Spring vacation begins
25 Tuesday
Mid-term grades are due

April
1 Tuesday 8 a.m.
Spring vacation ends
24 Thursday
Honors Day
April 28–May 2 Monday–Friday
Registration for first semester 1986-87

May
3 Saturday 8 a.m.
Reading period for seniors
5 Monday
Grades due for seniors taking Comprehensives
12–13 Monday–Tuesday
Senior Comprehensives (Written)
14–17 Wednesday–Saturday
Senior Comprehensives (Oral)
16 Friday
Grades due for graduating seniors who took Comprehensives in January
17 Saturday
Alumni Day
19 Monday
Last day of second-semester classes
20–22 Tuesday–Thursday
Final exam period
22 Thursday
Final Faculty meeting
23 Friday
Board of Trustees meeting
23 Friday 8 p.m.
Baccalaureate Service
24 Saturday 10 a.m.
Commencement
26 Monday
Final grades are due

College Calendar 1986-1987

First Semester

August
30-31 Saturday-Sunday
Orientation and evaluation for new students

September
1 Monday
Registration
2 Tuesday
Classes begin for all students
8 Monday
Last day for re-adjustment of schedules without academic and financial penalty; last day to add a course
11 Thursday
Formal Convocation
15 Monday
Last day to determine credit/no credit

October
4 Saturday
Homecoming
20 Monday
Last day of classes for first-half of semester
20-21 Monday-Tuesday
Final exams for first-half semester courses
24 Friday
NO CLASSES; mid-term grades are due
27 Monday
Writing Qualification Test for Freshman Seminars

November
1 Saturday
Parents' Day
8 Saturday
Board of Trustees Meeting
17-21 Monday-Friday
Registration for second semester
21 Friday 4 p.m.
Thanksgiving vacation begins

December
1 Monday 8 a.m.
Thanksgiving vacation ends
16 Tuesday
Last day of first-semester classes
17 Wednesday
Reading Day
18-20 Thursday-Saturday
Final exam period
22 Monday
Final grades are due

January Term (January 5-30)

January
26-27 Monday-Tuesday
Senior Comprehensive Exams (Written)
28-31 Wednesday-Saturday
Senior Comprehensive Exams (Oral)

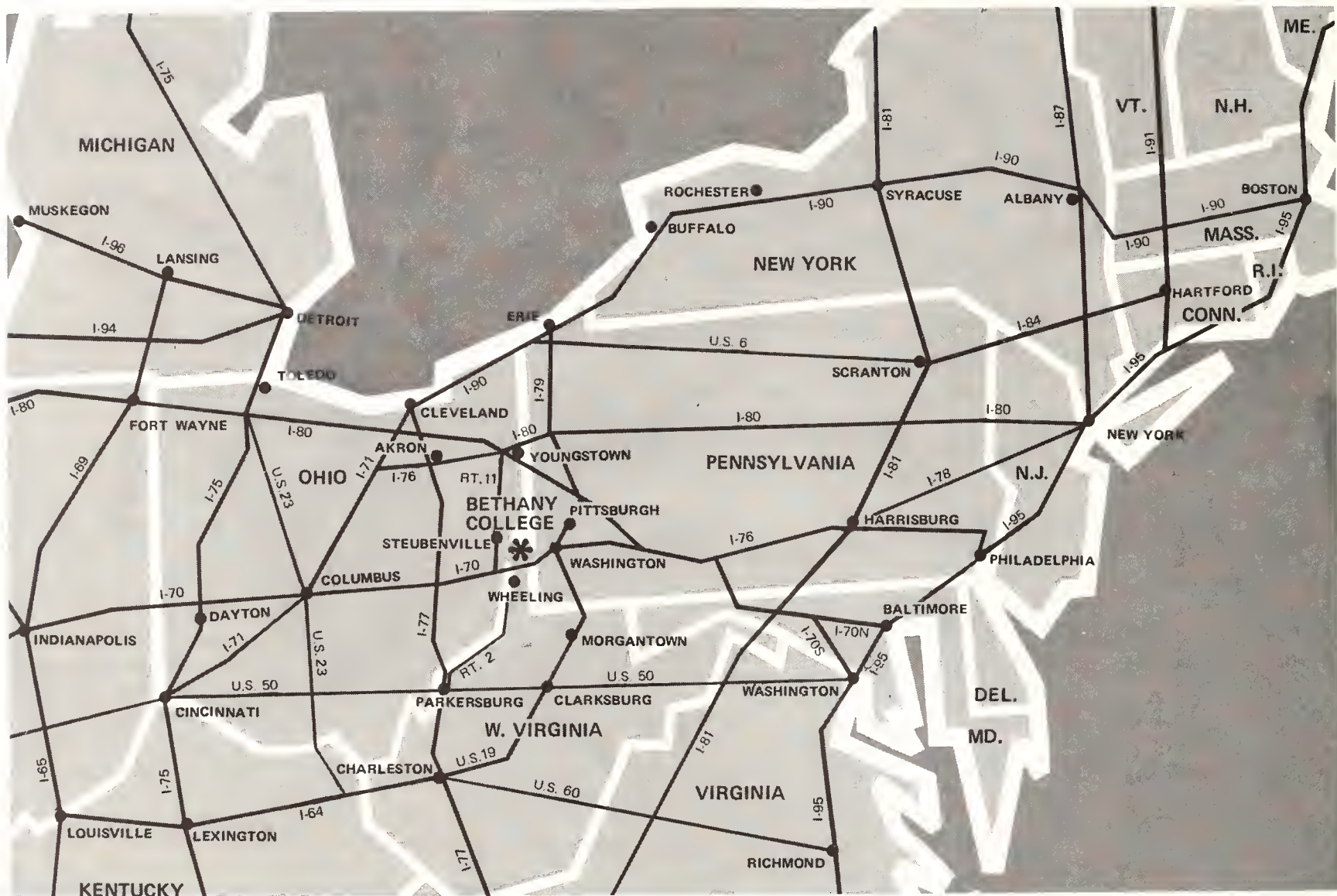
Second Semester

February
1 Sunday
Registration for all students and Diagnostic Writing Test for all transfers and readmissions
2 Monday
Classes begin for all students
6 Friday
Last day for re-adjustment of schedules without academic and financial penalty; last day to add a course
12 Thursday
Formal Convocation
13 Friday
Last day to determine credit/no credit

March
5 Thursday
Founder's Day
12 Thursday
Writing Qualification Test (Sophomores and Juniors)
18-19 Wednesday-Thursday
Final exams for first-half semester courses
20 Friday
Last day of classes for first-half semester courses
20 Friday 4 p.m.
Spring vacation begins
24 Tuesday
Mid-term grades are due
30 Monday, 8 a.m.
Spring vacation ends

April
23 Thursday
Honors Day
April 27-May 1 Monday-Friday
Registration for first semester 1987-88

May
2 Saturday 8 a.m.
Reading period for seniors
4 Monday
Grades due for students taking Comprehensives
11-12 Monday-Tuesday
Senior Comprehensives (Written)
13-16 Wednesday-Saturday
Senior Comprehensives (Oral)
15 Friday
Grades due for graduating seniors who took Comprehensives in January and last day of classes
16 Saturday
Alumni Day
18-20 Monday-Wednesday
Final exam period
21 Thursday
Final Faculty meeting
22 Friday
Board of Trustees meeting
22 Friday 8 p.m.
Baccalaureate Service
23 Saturday 10 a.m.
Commencement
25 Monday
Final grades are due



Bethany Profile

Bethany College, now 145 years old, is a highly contemporary institution based in the tradition of the liberal arts.

The College offers a wide array of studies and awards bachelor of science or bachelor of arts degrees in the fields of Accounting, Biology, Chemistry, Communications, Computer Science, Economics and Business, Education, English, Fine and Applied Arts, French, German, Health Science, History, Interdisciplinary Studies, Mathematics, Philosophy, Physical Education, Physics, Politics and Public Policy, Psychology, Religious Studies, Science Applications, Spanish, Sociology and Social Work.

In addition, pre-professional education is available in chemistry, dentistry, engineering, law, medicine, public administration, theology, and veterinary medicine.

The College's program of liberal education prepares students for a lifetime of work and a life of significance. Bethany places particular emphasis upon the leadership development and broad areas of communications, management, public policy and administration, and science and technology.



Bethany has excellent facilities to support the traditional offerings and its emphases, and integrates today's technology in its general education program. As one example, computing, a central feature in many academic disciplines, is offered as a field of concentration (major), and is an emphasis for the coming decade. The College's Center for Academic Computing has been enhanced with the recent addition of a visual arts center featuring up-to-date computer graphics equipment.

Bethany was founded March 2, 1840, by Alexander Campbell, educator, celebrated debater and Christian reformer who provided land and funds for the first building and served as first president.

Since its inception, Bethany has remained a four-year private liberal arts college affiliated with the Christian Church (Disciples of Christ). This religious body, of which Campbell was one of the principal founders, continues to support and encourage Bethany, though it exercises no sectarian control. Students of virtually every religious communion have been welcomed to the College.

Bethany is located in the northern panhandle of West Virginia in the foothills of the Allegheny Mountains. Pittsburgh is 48 miles to the northeast. Wheeling, W. Va., and Washington, Pa., are each a half-hour drive from the 1,600-acre campus.

Bethany students, approximately 800, represent nearly 30 states and nine foreign countries. Typically, one third is from the East coast and the New England states. Another third represents the Mid-Atlantic Region, while the remaining one-third is from other states and countries.



Goals

Bethany College is a private, four-year, church-related but autonomous, co-educational, residential, liberal arts college with a tradition of innovative and quality educational programs.

Bethany emphasizes critical reason and the religious dimensions of life, community experience and the importance of the individual, ethical responsibility and the satisfaction of

personal accomplishments, the integration of the total person and the value of a life of work and service to others.

The Bethany education program is designed to help each Bethany student realize leadership potential, intellectual skills and moral capacities in the accomplishment of these goals:

- to discover how to acquire, evaluate and use knowledge
- to master the skills of communication
- to cooperate and collaborate with others in study, analysis and formulation of solutions to problems
- to understand contemporary issues and events
- to analyze personal values, to perceive and to deal sympathetically with the values of others, and to be open to the continued evaluation of both
- to make progress toward the selection of and the preparation for a vocation
- to integrate the various experiences of life and to see the relationship of the college experience to future development as a responsible citizen.





Accreditation, Memberships

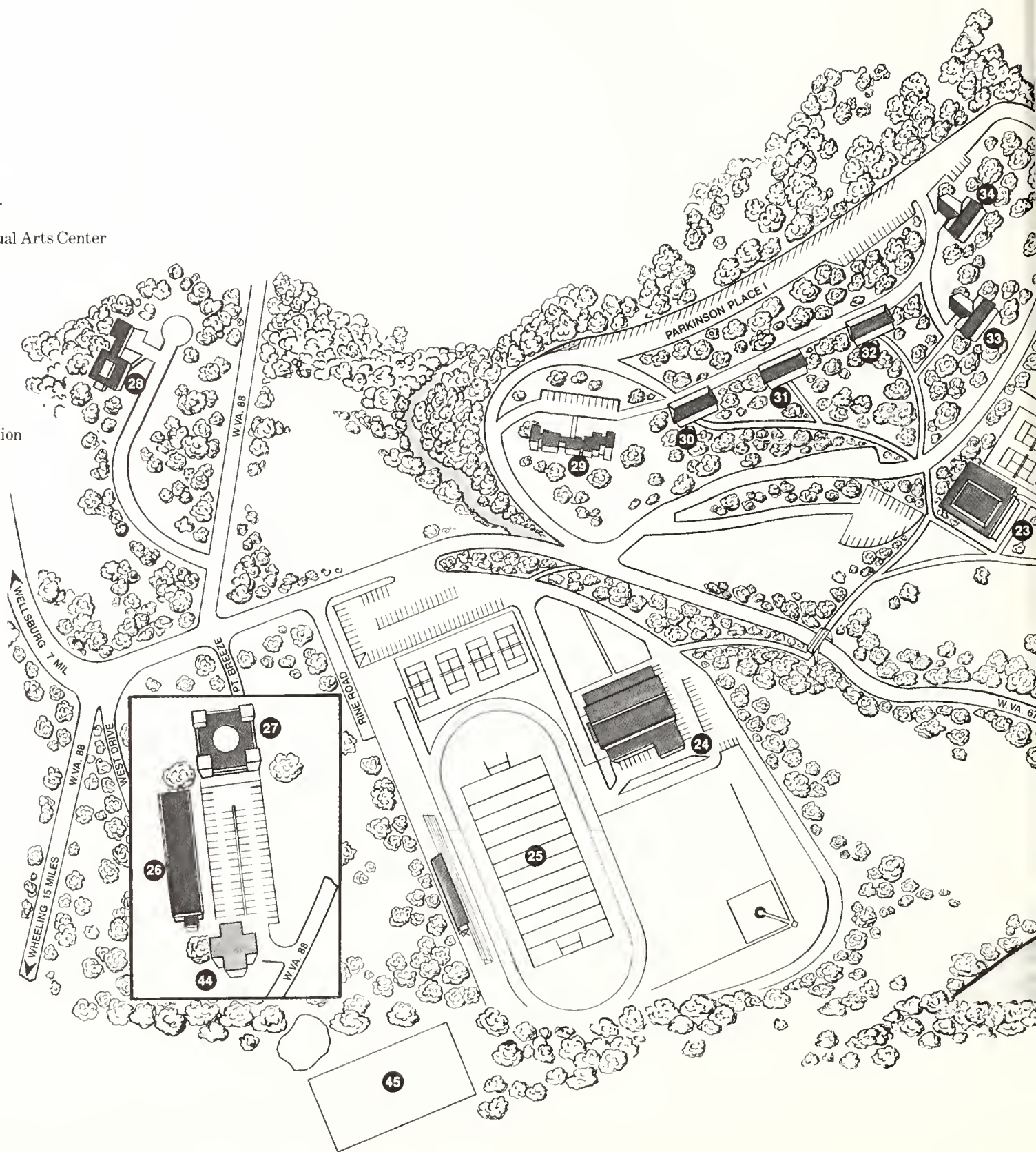
Bethany College is accredited by or holds memberships in:

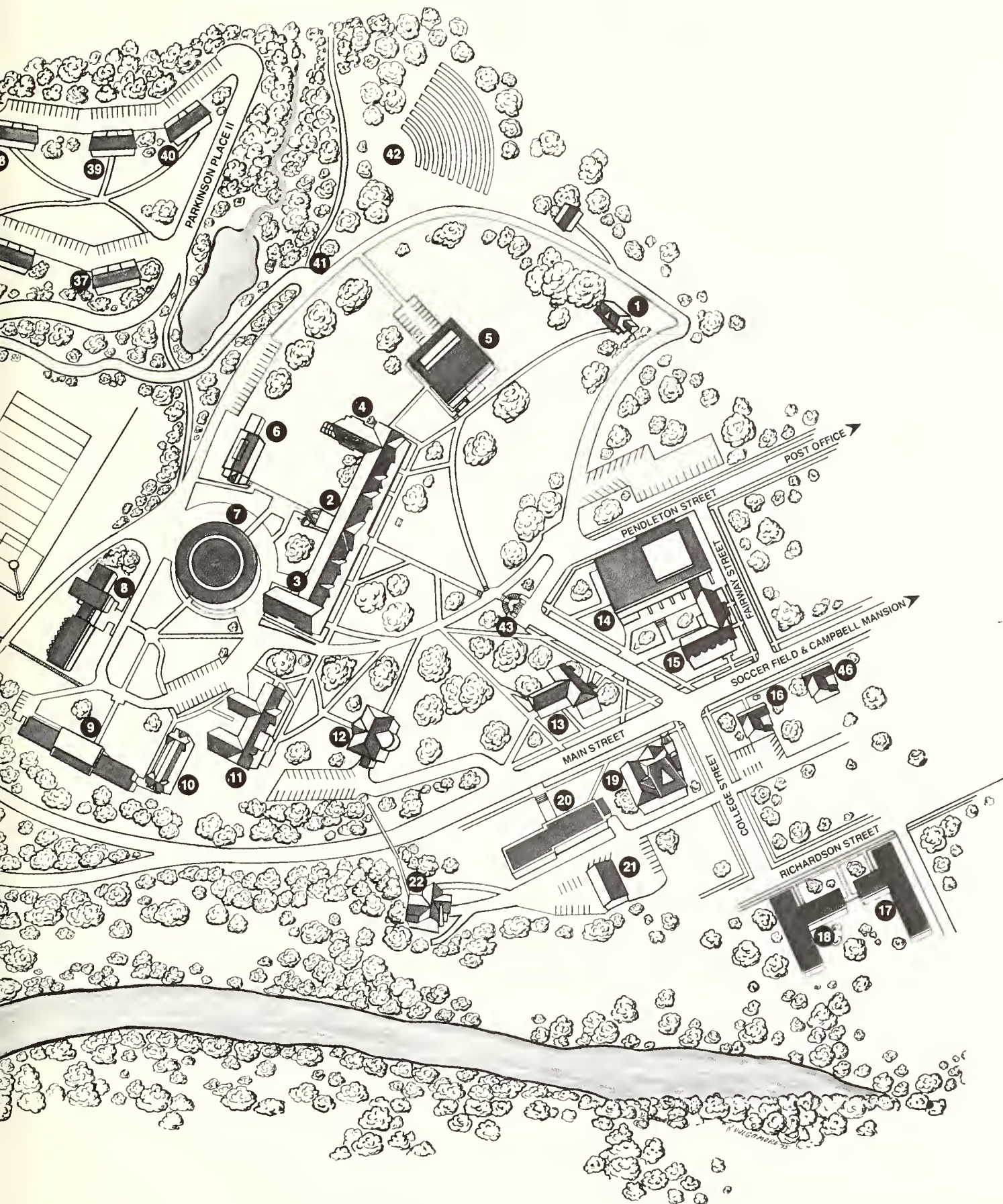
- North Central Association of Colleges and Secondary Schools
- Association of American Colleges
- American Council on Education
- American Association for Higher Education
- College Entrance Examination Board
- Council on Social Work Education
- American Association of Colleges for Teacher Education
- National Council for the Accreditation of Teacher Education
- Division of Higher Education of the Christian Church (Disciples of Christ)
- Women graduates are eligible for membership in the American Association of University Women



Bethany

1. Pendleton Heights
2. Old Main
3. Commencement Hall
4. Oglebay Hall
5. Steinman Fine Arts Center
Wailes Theater
6. Grace Phillips Johnson Visual Arts Center
7. Richardson Hall of Science
Weimer Lecture Hall
8. Phillips Memorial Library
9. Morlan Hall
10. Harlan Hall
11. Phillips Hall
Renner Too
Maxwell's
12. Cramblet Hall
13. Cochran Hall
14. Benedum Commons
15. Bethany House-Renner Union
Bookstore
Admission Office
16. Infirmary
17. McEachern Hall
18. McLean Hall
19. Bethany Memorial Church
20. Campbell Hall
21. Physical Plant
22. Heating Plant
23. Knight Natatorium
24. Alumni Field House
25. Rine Field
26. Gresham House
27. Leadership Center
28. Highland Hearth
29. Faculty Apartments
30. Clark House
31. Hagerman House
32. McDiarmid House
33. Goodnight House
34. Woolery House
35. Zeta Tau Alpha
36. Heritage House
37. Alpha Xi Delta
38. Phi Kappa Tau
39. Kappa Delta
40. Phi Mu
41. Weimer Nature Trail
42. Amphitheater
43. Oglebay Gates
44. Harder Hall
45. Athletic Field
46. Delta Tau Delta
Founder's House







Admission

Application

Bethany welcomes applications for admission from candidates who feel they would contribute to and benefit from a Bethany education. Admission is based on a careful review of all credentials presented by the candidate. The Committee on Admission accepts candidates it considers best qualified among those applying. In no case does the meeting of minimum standards assure admission. Acceptance is contingent upon a candidate's successful completion of secondary school.

The College seeks students who have prepared themselves for a liberal arts curriculum by taking at least 15 units of college-preparatory work. Although the College does not absolutely prescribe how these units should be distributed, it encourages a minimum of four years of English, three years of mathematics, three years of science, three years of social science and at least two years of a foreign language. For students who have developed individual curricula or are involved in experimental honors programs, the Committee on Admission makes special evaluation.



The application process includes furnishing a transcript of completed work, a personal file, two references, and either the College Entrance Examination Board Scholastic Aptitude Test (SAT) scores or the American College Testing Program (ACT) scores. Supporting documents that might be of help in the process of admission, that is poetry, plays, short stories, music, artwork, photography, and journalistic writings, may also be submitted.

Bethany's admission policy enables the Committee on Admission to act on completed applications as they are received. Applicants will be notified of the Committee's decision approximately three weeks after all credentials have been received. Early application is advised.

Transfers

Transfer students are welcome. Procedures for transferring to Bethany are similar to those for admission of freshmen. Any student in good standing at a fully accredited institution of higher education is eligible for acceptance. A majority of students accepted as transfers have above average grades and are seeking a campus life unlike that which they have experienced.

Grades of "C" or better are accepted along with course work in which credit (on a credit/no credit basis) or pass (in a pass/fail system) has been received. If requested, course work from other institutions will be reviewed by Bethany's registrar prior to making application.

Community/Junior College Graduates

Students who have received or will receive an Associate in Arts or Associate in Science Degree and find Bethany's curriculum suited to their educational goals are cordially encouraged to apply.

Holders of the A.A./A.S. Degree who are accepted receive at least two years (minimum 60 hours) credit, enter as juniors, and receive all the rights and privileges of upperclass students.

The College will make every effort to assist holders of Associate degrees to complete their baccalaureate programs within two years at Bethany. However, some fields of concentration may require more than 68 additional hours beyond the 60 referred to above, depending on the type of Associate's program the student has completed.



Early Admission

Some students complete their secondary school graduation requirements a year early and decide to pursue college admission after their junior year. For those who have demonstrated maturity and show evidence of a strong academic background, Bethany offers a program for early admission. For this type of admission, the usual admission procedures must be followed. A personal interview on campus as well as a discussion between the student's college counselor and a Bethany admission officer are required.

Advanced Placement

Students may receive advanced placement and/or credit from any department in the College through a testing program. This must be accomplished before the end of the first year at Bethany College. Those who wish to receive credit by examination should consult with the Office of Career and Professional Development and the appropriate department head.

Credit may be received for courses waived as a result of high scores on the College Entrance Examination Board Testing Program for Advanced Placement. The waiving of courses or granting of credit, however, are departmental matters and require consultation with the appropriate department head upon matriculation.

Visiting Bethany

Although not required, an on-campus interview with an admission officer is highly recommended. A campus visit will enable the student to develop some understanding of the College and its expectations. A comprehensive tour, observation of classes, and interaction with Bethany students and faculty are available upon request.

Prospective students are also invited to remain overnight as the guest of a Bethany student. Meals and overnight accommodations in college housing for prospective students are provided by the College. Lodging for parents is available on campus at Gresham House, as well as nearby lodges and motels. Transportation arrangements from the Greater Pittsburgh International Airport, as well as from the Pittsburgh rail and bus terminals, may be arranged through the Admission Office.

The Admission Office is open Monday through Friday from 9 a.m. to 4 p.m. and Saturday from 9 a.m. to 1 p.m. throughout the year. Appointments may be made by calling 304-829-7611 or by writing the Admission Office, Bethany College, Bethany, West Virginia 26032. Three days advance notice is requested to make proper arrangements.

Information on admission and registration fees, as well as details on expenses, aid and scholarships are on Pages 12-17 and 33-37.

Foreign Students

Bethany is pleased to receive applications from students of other countries. Approximately 10 countries are represented on campus each year.

Students from non-English-speaking countries are required to submit, along with an application for admission, a complete secondary school transcript, the results of either the American College Testing Program (ACT) or the College Entrance Examination Board Scholastic Aptitude Test (SAT) and the Test of English as a Foreign Language (TOEFL), and at least two letters of recommendation. Applicants for the Fall Semester must submit the above stated materials by February 1.

Foreign students are also requested to complete a Foreign Student's Financial Aid Application and Declaration. This form is to be returned with admission materials by the deadlines mentioned. Although Bethany is willing to review requests for financial assistance, funds are limited.

Application for Admission

A non-refundable \$15 fee is required at the time of formal application.

Application for Readmission

Students previously enrolled in Bethany College who wish to return for additional work must file an Application for Readmission with the Registrar's Office. A \$5 fee is required at the time such application is made.



Registration Deposit

Upon acceptance for admission or readmission, a \$100 registration deposit is required of all students. Once this deposit is paid it is not refunded until after graduation or until a Bethany student completes the following procedure:

Students not being graduated may have the deposit refunded after the last term of their attendance if written notice is given to the Business Office prior to the advance enrollment date for the next

regular term. Such students may be readmitted by approval of the Dean of Students and the Business Manager.

Matriculation Fee

A \$20 fee, payable once by every new student, covers, in part, the cost of orientation and evaluation procedures for new students.



Expenses, Aid

Bethany College is a non-profit institution. Tuition, fees and other general charges paid by the student cover approximately two-thirds of the College's instructional and operational expenses. The remainder comes from income from endowment funds and from gifts and contributions. Bethany continues to keep costs as low as possible.

Comprehensive Charges

Comprehensive charges for the 1985-1986 year at Bethany include the following:

Tuition and Fees	\$6,980
Room (Double Occupancy)	\$950
Board	\$1,525
Student Board of Governors	\$140
Bethany House-Benedum Commons	\$65

While a general charge is stated for Tuition and Fees, this fee may be divided into \$6,380 for tuition and \$600 for the following activities and services: athletics, health service, library, lectures, plays, concerts, publications, student activities, and laboratory services with the exception of music and art.

The Bethany House-Benedum Commons Fee is charged to all registered students and covers the operation and maintenance costs of the student union.

No reduction is made in student accounts for course changes made after the first two weeks of the semester. The College is required to collect a three per cent West Virginia sales tax on published charges for room and parking permits. Bethany reserves the right to change, without advance notice, the price for room, board and health insurance.

Financial Aid

Bethany believes that the funding of a student's education is primarily a family responsibility. However, financial assistance is available to those students whose resources will not fund a Bethany education and yet sincerely desire to attend. Outstanding students, regardless of demonstrated need, frequently receive scholarships and grants to attend the College. Several programs are available to such students. Inquiries are encouraged.

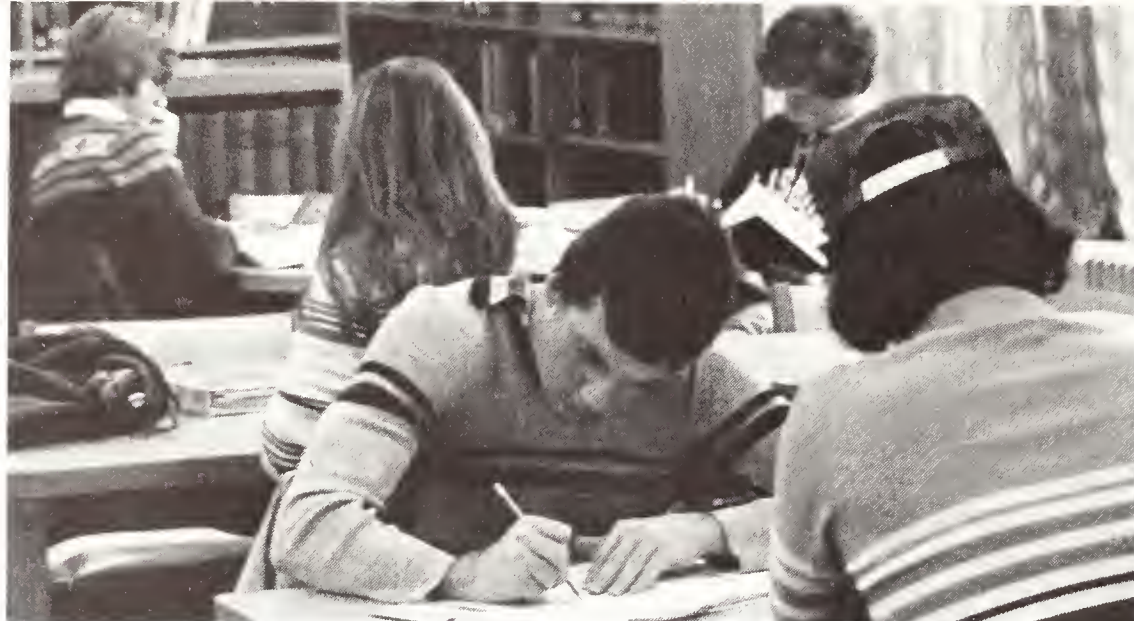
All need-based aid is awarded through careful evaluation of the Financial Aid Form (FAF), available from the student's guidance counselor. Designation of Bethany College as an institution to receive the processed information is required. All applicants for admission to Bethany are sent detailed information and instructions regarding the financial aid application and awarding processes, normally beginning in December.

Because of the large number of applications for financial aid, assignment of funds is made according to the date applications are processed, with April 1 established as the priority deadline for all new students. The earlier a student completes all admission materials and all financial aid materials, the faster the student will be awarded financial aid. However, the



FAF must not be completed until after January 1 as it also serves as an application for the Pell Grant Program.

A financial-aid applicant whose need for assistance has been verified by the College Scholarship Service will have his or her need met through a variety of financial aids, including scholarships, grants, loans, and College employment. The student has the option of accepting any or all of the aid offered. An interview with an officer of the College once the offer of assistance has been made can help to explain any problems. The Admission Office or the Financial Aid Office helps to arrange these interviews.



Fees for Overseas Programs

Oxford:

\$4,880 for one semester for tuition and fees, room and board and activity fees.

Madrid:

tuition and fees for one semester (\$3,965) includes round-trip air fare, tuition and examination fees and stipend to sponsor in Madrid.

Sorbonne:

tuition and fees for one semester (\$3,965) includes round-trip air fare, tuition and stipend to sponsor in Paris.

Tübingen:

tuition and fees for one semester (\$3,965) includes round-trip air fare, tuition and stipend to sponsor in Tübingen.

Other Special Fees

Chemistry 490	\$20
Education 470: off-campus student teaching (<i>per semester</i>)	\$3,729
<i>(includes tuition, fees and pre-school week board privileges in the Bethany dining hall)</i>	
English 160	\$15
Physical Education 340	\$30
Physical Education 341	\$30
Each academic hour when less than 13	\$267
Each academic hour in excess of 16	\$230
Auditing a course, per semester hour	\$230
<i>(a student is not charged if paying regular tuition and fees and the total program, including the audit, does not exceed 18 hours)</i>	
Comprehensive Examination	\$25
Graduation Fee	\$35
Matriculation Fee	\$20
Special guidance and advisory fee (<i>pre-college</i>)	\$10 to \$25
Special examinations in any department	\$15
<i>(there is a \$10 charge for each credit hour awarded by examination)</i>	
Special Room Rates:	
Single	\$535
Double as Single	\$625
Key deposit for dormitories	\$5
<i>(refunded if key is returned)</i>	

Infirmity charge per day	\$5
<i>(after the first three days each semester)</i>	
Late registration	\$3
<i>(per day)</i>	
Automobile Registration	\$20
Sickness Insurance	\$85

Fine and Applied Arts Fees

FAA 201	\$5
FAA 210	\$25
FAA 303	\$15
FAA 304	\$15
FAA 310	\$15
FAA 320	\$15
FAA 404	\$10
FAA 405	\$15
FAA 406	\$15
FAA 420	\$15
FAA 425	\$20

Fine and Applied Arts fees will also be required for independent study and studio courses where departmental materials are being used.

Private music lessons, two weekly \$145 per semester. Private music lesson, one weekly \$80 per semester.

Organ practice, one hour daily
\$35 per semester

Instrument Rental
\$10 per semester

Piano Practice, one hour daily
\$10 per semester

Voice Practice, one or two hours daily
\$10 per semester

Breakage Deposit

Chemistry and physics breakage deposits are covered by a \$10 breakage card which the student purchases each semester for every laboratory course in which the student is enrolled. In the event breakage exceeds \$10, an additional \$10 breakage card must be purchased. Unused portions are refunded at the end of each academic year.

Payment of Student Accounts

At registration, an invoice listing all charges due for the following semester is prepared for each student. Payments are due in accordance with the following schedule:

First Semester:

By August 15 payment due

Second Semester:

By January 15 payment due

Scholarships and loans may be applied as credit against August or January payment requirements.

Students will not be permitted to register if the payment requirements for each semester are not met. These requirements are in addition to the registration deposit. Checks or drafts should be made payable to Bethany College.

Bethany College bills for tuition, fees, room and board – twice yearly; other charges are billed as incurred. Twice yearly billings are payable in advance by August 15 and January 15 for the fall and spring semesters respectively.

Accounts past due – a monthly service charge of 1.5% on the first \$1,500 (18% per year) and 1% on any remaining balance (12% per year) will be charged as of the 25th of each month.



Students may not take final examinations, receive academic credit, obtain transcripts or graduate until satisfactory arrangements are made to cover financial obligations.

Monthly Payment Plans

Bethany has made arrangements with the Insured Tuition Payment Plan and EFI – Fund Management whereby student accounts may be paid on a monthly basis during the year. Arrangements to use this plan should be made prior to the registration period. Information may be obtained by writing to the Bethany College Business Office.

Student Drawing Account

The Business Office provides a limited banking service whereby students may deposit funds and draw on them as required. Students or their parents may make deposits to this recommended student drawing account which avoids the necessity of keeping on hand any substantial amount of money. All checks for this account must be made payable to the Bethany College Student Drawing Account.

Withdrawals and Refunds

After registration, there is no refund of room charges or fees. A student voluntarily withdrawing or withdrawing because of illness during the course of the semester will be charged 10 per cent of tuition charges for each week of attendance or part thereof. There is no refund of tuition after the tenth week of attendance. There is no refund in the event that a student is dismissed or asked to withdraw during the course of the semester. Board refund is prorated, based upon food costs only. Special fees are not refundable.

A student wishing to withdraw from Bethany must file written notice with the Dean of Students to qualify for refund of deposit and adjustment of other charges.



Academic Programs

Based in the liberal arts tradition, Bethany's academic program is designed to meet the educational needs of the individual while insuring breadth, depth and integration of knowledge. Bethany has designed its program of study to help students develop basic intellect, skills of learning, examined values, and good citizenship. Leadership preparation is a central theme of the College.

Through Fields of Concentration (majors) in the traditional academic disciplines and a wide range of pre-professional studies (see listings on Page 5), Bethany prepares students for further study, for employment, and for lives marked by special accomplishments.

A rich variety of learning opportunities is provided both in and out of the classroom and ranges from seminars, lecture courses, independent studies and laboratories to musical and dramatic productions and intercollegiate and intramural sports. Many off-campus programs are offered, including study abroad.

Learning opportunities at Bethany are set within a framework of common educational goals and programs which are organized to provide direction and guidance, as well as independence and choice.

Complementing Bethany's program of liberal education is the Professional Core Program, four distinctive and inter-related curricular options which supplement the student's field of concentration, broaden career opportunities and extend the academic experience.

Professional Core Programs are offered in:

- Management
- Public Affairs (Public Policy/Administration)
- Communication (Marketing or Electronic Media)
- Science and Technology (Computing or Pre-Professional Science)

The Professional Core Program also is viewed as preparation for graduate or professional school in an area outside the student's regular field of concentration. All courses in a Professional Core must be taken for a letter grade.

Details on the Program are available in the Office of Career and Professional Development, as well as from individual faculty members. Students interested in pursuing this option should see their faculty advisor at an early point in their course planning. The four Professional Core Programs, including the courses in each, are outlined on page 43.

Bethany offers pre-professional study programs in:

- Engineering
- Medical and Health Professions
- Law
- Ministry

Students participating in one of the engineering programs spend three years in the liberal arts environment at Bethany and then attend Case-Western Reserve University, Columbia University, Georgia Institute of Technology or Washington University for an additional two years. The program permits the student to earn both a bachelor's degree from Bethany and a B.S. in engineering or applied science from the cooperating engineering school upon successful completion of the five-year sequence.

Students desiring to prepare for the study of medicine, dentistry or any of the health related fields find instruction and facilities at Bethany which satisfy the entrance requirements for the best professional schools.

Medical admission tests must be taken in the junior year and specific course planning is required, beginning with the first semester of the freshman year. Bethany also provides a degree program for certified allied health professionals who have completed accredited technical programs at other institutions.

No single curricular pattern is recommended as preparation for law school, but Bethany provides the key ingredients for entrance, such as breadth of knowledge and high levels of achievement in writing, critical thinking and logical reasoning.

Students planning to enter church vocations complete their preparation in seminaries and graduate schools of religion after undergraduate pre-seminary studies at Bethany.

Bethany provides thorough preparation for professions in the fields of chemistry, business administration, communications media, public administration, teaching of all levels, social work and many more.

Students are encouraged to contact individual academic departments, as well as the College's Office of Career and Professional Development, for academic and career planning.

Requirements for a Bethany Degree

The Bachelor of Arts and Bachelor of Science degrees are conferred by Bethany College.

The Bachelor of Arts degree is conferred upon the student who satisfactorily completes the following requirements:

- 128 semester hours with a minimum cumulative grade point average of 2.0
- a field of concentration
- the Perspectives program
- a senior project
- the senior comprehensive examination in the field of concentration
- demonstrated proficiency in expository writing
- the practicum requirement
- a freshman seminar
- a freshman interdisciplinary lecture course
- Religious Studies 100
- the residence requirement
- attendance at the commencement exercise

The degree of Bachelor of Science may be conferred upon a student who completes the Bachelor of Arts requirements and who chooses a field of concentration in biology, chemistry, computer science, mathematics, physics, psychology (B.S. plan) or science applications.



Field of Concentration

The field of concentration may be either departmental or faculty-student initiated.

A departmental field consists of a minimum of 24 credit hours (excluding the senior project) and a maximum of 48 hours within the department. No more than 24 hours from related disciplines may be required by a department.

The faculty-sponsored or student-initiated field, which may cut across departmental lines, may be developed. This interdisciplinary field of

concentration requires the approval of the Committee on Interdisciplinary Study. Such fields consist of a minimum of 24 hours (excluding the senior project) and a maximum of 72 hours. No more than 48 hours in any one department will be counted toward graduation.

These guidelines exclude any language requirements necessary for professional certification or for admission to a graduate program.

Perspectives Program

The Perspectives Program provides more than breadth to the student's academic experience. In addition to the accumulation of knowledge in a wide variety of disciplines, it is expected that all Bethany graduates will develop eight perspectives on their world, each of which is, in appropriate ways, systematic, ethical and integrative. The eight perspectives are historical, global, religious, aesthetic, scientific, quantitative, social and personal.

All courses within the Program address three overarching concerns of liberal learning: 1) systematic issues of critical thinking about the basic assumptions, methodologies and frames of reference of the subject field, 2) ethical issues within the disciplines studied, and 3) integrative issues designed to assist the student in gaining a personal perspective or point of view about the world as seen through the examined perspective.

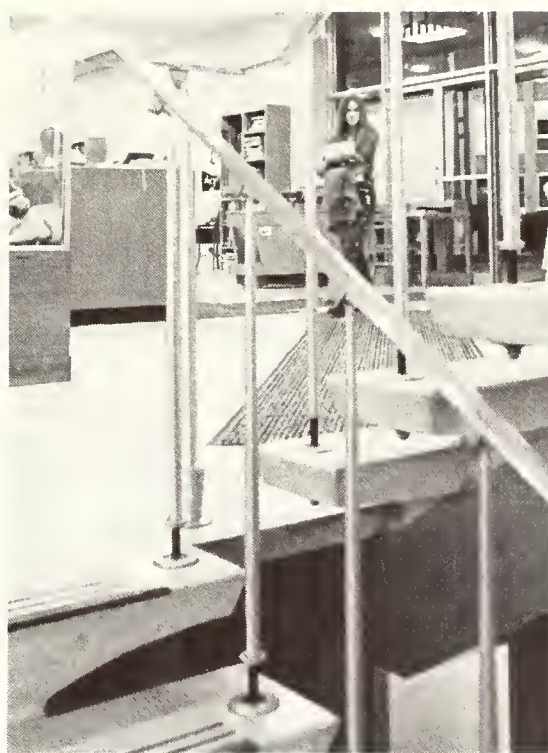
To this end, every student must complete at least four hours chosen among the courses in each of the perspectives categories listed below, plus at least eight additional hours for a total of forty hours in the program. No more than eight hours can count toward fulfillment of the requirement in any one category.

Courses for which students have received credit by examination from a department as a result of high scores on the College Entrance Examination Board Testing Program for Advanced Placement or as a result of special departmental testing procedures may be substituted for the eight additional hours noted above.

The list of approved courses may change from year to year. Only courses taken in the year they appear on the approved list will count toward fulfillment of the requirement.

Historical Foundations: *to achieve a knowledgeable view of basic aspects of the origins and the modern background of Western civilization*

Communications 401; English 325,



326, 330, 341, 342, 370; Fine and Applied Arts 110, 111; French 313; 351, 352; German 351, 352; History 100, 201, 202, 301, 302; Philosophy 323, 324, 325; Physical Education 244; Spanish 351, 352, 353.

Global Awareness: *to gain an appreciation and understanding of the diversity of the world's cultures, not only Western but non-Western*

Communications 403; English 268; French 101, 102, 200, 301; German 101, 102, 200; History 426; Interdisciplinary Studies 201, 202, 203, 204; Religious Studies 341, 342, 352; Spanish 101, 102, 200, 301.

Judaean-Christian Tradition: *to understand the religious tradition of the West, particularly the Judaean-Christian tradition, including the study of the Bible*

Religious Studies 100, 300.

Aesthetic Judgment: *to develop an ability to discriminate among various aesthetic forms and values and to gain a basic appreciation of the arts*

English 140, 150, 160, 261-262, 263-264, 270, 351; Fine and Applied Arts 101, 102, 120, 200, 201, 270; Philosophy 358.

Experimental Science: *to learn how to explore the natural world through scientific investigation, including both first-hand laboratory (or field) experience and inquiry into the humanistic implications of the sciences*

Biology 100; Chemistry 100, 101, 102; General Sciences 100, 201; Interdisciplinary Studies 210; Physics 201, 202; Psychology 100.

Quantitative Reasoning: *to achieve a knowledgeable view of analytical and quantitative ways of examining the world*

Computer Science 143, 144, 201, 202; Mathematics 103, 201, 250, 281; Philosophy 123; Psychology 103.

Social Institutions: *to grasp the basic organizing principles, structures, policies, and governing ideas of Western social (economic, political, etc.) institutions*

Communications 101, 304, 402; Economics 200, 300; General Science 101; Philosophy 352; Physical Education 243, 280; Politics and Public Policy 225, 231, 300; Religious Studies 322; Social Work 120, 230; Sociology 100, 205, 210, 351, 356.

Human Personality and Behavior: *to establish insight into the ways human beings understand themselves and their behavior and development*

Education 201, 202; Philosophy 100, 124, 252, 355; Physical Education 290; Psychology 186, 324, 325, 326; Social Work 201, 202, 310; Sociology 220.

All courses taken to satisfy perspectives and field of concentration requirements must be taken on a graded basis. All students are required to pass Religious Studies 100. Generally, this course is taken in the freshman or sophomore year, and it may be used to fulfill part of the perspectives program requirements. Students should not enroll in Quantitative Reasoning courses until they have counseled with their advisors regarding the results of the freshman diagnostic test in quantitative skills.

Senior Comprehensive Examination

Capping the Bethany education is the Senior Comprehensive Examination. The examination is scheduled after all requirements for the field of concentration are met and the student has senior standing and at least a 2.0 cumulative average in the field. Comprehensive examinations assure the College of qualitative accomplishment and lead the student to a sense of self-confidence and achievement.

The examination is both written and oral and is offered in January and in May. The oral part of the examination is scheduled by the registrar as soon as practicable after the written, but in no case more than two weeks later. To register for taking the Senior Comprehensive Examination, a student must contact the Office of the Registrar at least two months prior to the first day of the written examination.

Students who have completed all requirements in their field may take the examination in January with the consent of their advisor(s). Students failing the examination in January may take it again in May or at any time it is regularly given within the following 12 months. If the student fails the second time, the student may petition the faculty for a re-examination during the following year. No student may take the examination more than three times.

In some departments, sections of the Graduate Record Examination (GRE) may also be considered part of or prerequisite to the Senior Comprehensive.

Students who do unusually well on the Senior Comprehensive Examination are listed at graduation as having "passed with distinction."



Senior Project

Each student must produce a project which meets the standards of his or her field of concentration.

The project is received and evaluated during the final semester of the senior year. Two to eight hours of credit are given after the final evaluation and approval of the project. Scheduling of the project is at the discretion of the department or the student's advisory committee.

The project is evaluated by at least one person in the field of concentration other than the student's advisor(s). The final evaluation is made in consultation with the student and the project is made available to the College community.

Projects range from extensive research papers to creating graphics on a computer, writing and producing a radio series, designing a brochure, writing and presenting a play.



Writing Proficiency Requirement

All students must achieve and maintain an above-average level of proficiency in expository writing. They may do this by either taking the annual Writing Qualification Test or by satisfactory completion of selected writing courses offered by the English Department. Special arrangements are made for students who transfer from other colleges and transfer students should consult the Department of English immediately upon enrolling at Bethany.

Details on the Writing Qualification Test, including when it is given, as well as information on writing courses from which the student may elect, are included under the Writing Proficiency Program section in the English Department, Page 68.

Practicum Program

Practicums are practical experiences encompassing values Bethany believes to be essential to a complete education. These experiences make a student's academic studies more relevant to the everyday world.

Each student must successfully complete four practicums. They are:

- an example of responsible citizenship
- an awareness and involvement in health, physical education and recreation
- an intercultural living experience
- a vocationally oriented placement.

Students, with the assistance of the advisor and the director of practicums, develop proposals which must have approval of a faculty member and meet the guidelines established for each practicum. Each student completes an evaluation of the experience after each practicum.

Seniors must fulfill all proposals by February 10 and all evaluations by April 15 of the graduation year.

Further information is available from the director of practicums or the registrar.

Residence Requirement

Four years are usually required to satisfy the course and residence requirements for the baccalaureate degree. Students of superior ability may complete the requirements in less time. As a rule, the senior year or the last two semesters are to be spent in residence at the College. However, students who have had one full year of residence previous to their senior year, and who apply for and are approved by the Policy Appeals Board for off-campus study programs during their senior year, may sometimes be permitted to count that work toward graduation requirements.

Freshman Program

Freshman Seminar: All entering freshmen enroll in a freshman seminar during the fall semester of the freshman year. The professor directing the seminar also serves as the student's academic advisor. (Not required for transfer students.)

Freshman Interdisciplinary Course: Freshmen take the freshman interdisciplinary course in the spring semester of the freshman year. (Not required for transfer students with junior standing at entry.)

Descriptions of the courses offered in the freshman program are on Pages 44-45.

Academic Advisor

The student-advisor relationship is the cornerstone of a Bethany education. The student and his or her advisor work together to develop appropriate classroom and experience-based programs. Freshmen see their advisors two times a week during the first semester's freshman seminars and also meet privately with advisors.

Usually during the sophomore year, students elect a major field of concentration, thus transferring to an advisor associated with their major area of interest.

Advisors are designated for freshmen, for specific fields of concentration, for each Professional Core Program, for career interests and for specific services such as campus employment, counseling, graduate programs, testing, scholarships, vocational information and guidance, and others.

A listing of advisors – for freshmen, for fields of concentration, career interests, the Professional Core Program and special interests – is on Page 117.

Career and Professional Development

Bethany's Office of Career and Professional Development assists students and alumni in developing life skills, planning careers and obtaining both temporary and permanent jobs. Personal and career counseling are provided and workshops are presented on such topics as resume writing, interviewing, job hunting, values, skills identification, conflict resolution and time management. The Office coordinates and schedules campus employment and corporate recruiting. It also maintains a Career Resource Center consisting of career planning literature, job announcements, a volunteer contact network of alumni and friends of the College, material on internships and graduate and professional school information. Free credential service is available to all seniors and alumni who register with the Office.

Work Internships

A student may spend a semester combining practical professional experience with formal off-campus study. A student wishing to do this must arrange a full-time job in his or her chosen area and arrange independent study integrating this work experience with formal theoretical study.

A written proposal, signed by the department in which the student intends to earn academic credit, must



be submitted to the Curriculum Review Board of the College. This proposal must be signed by the faculty member charged with supervising and evaluating the project. The proposal must include a description of the student's goals in undertaking the program, a description of the experience that includes a summary of his or her responsibilities and the name of his or her supervisor, a description of the formal independent study course work, an explanation of the way in which the program relates the work experience and the formal independent study course work and a description of the methods to be used in supervising and evaluating the entire project.

Eight credit hours will be awarded for satisfactory completion of the project. No additional academic work may be taken during the semester of the project.

Washington Semester

Arrangements have been made for one or two advanced students in history, politics and public policy, economics or sociology to pursue studies in these fields under the direction of the American University in Washington, D.C. A student participating in this plan takes six to nine hours in regular academic work and six to nine hours in the study of government supervised by Bethany College and American University. Participants in the program must be recommended by the program advisor and have the approval of the Dean of the Faculty.

State Government Study

The Departments of History and Politics and Public Policy administer a program in conjunction with the West Virginia University Foundation in which an outstanding junior or senior is selected each year to spend one week in Charleston, W. Va., studying three branches of state government. Two hours of credit may be granted for this program.

Academic Common Market

Bethany is a member of the Academic Common Market, an interstate agreement among southern states for sharing academic programs. This agreement allows Bethany students, who qualify for admission, to apply for enrollment in 80 graduate degree programs in other common market states on an in-state tuition basis. This program is sponsored by the Southern Regional Education Board. Further information concerning the Academic Common Market may be obtained by contacting Bethany's Office of Career and Professional Development.



Overseas Study Offerings

Under approved supervision and direction, qualified students may secure credit for formal work completed in foreign colleges and universities. To be eligible for study abroad, the student should normally be a junior and must have the approval of the External Programs Committee.

Oxford Semester

Under this program, approximately 20 students spend the fall semester in Oxford, England, studying British literature, history, and culture with a Bethany professor. Participants are matriculated as full-time students at Bethany College, but live and study in Britain.

Paris Sorbonne Program

Under special arrangement with the Sorbonne, qualified Bethany students may enroll for a semester or full year in its Cours de Langue et de Civilisation Française. Bethany's official

representative in Paris serves as counselor to Bethany students during their stay at the Sorbonne.

Madrid Study Program

Under special arrangement with the University of Madrid, qualified Bethany students may enroll for a semester or full year at the university.

Tübingen Study Program

Qualified students are given an opportunity to do intensive study in the German language and to work out an individualized program at the University of Tübingen, Germany. An adjunct member of the Bethany faculty serves as mentor.

Other Overseas Programs

There are additional overseas programs in which Bethany students have participated.

The coordinator of international education programs provides interested students with information concerning programs which have been examined and approved.

External Programs

Bethany College develops special programs for older adults through intensive, short-term residential and off-campus seminars, institutes, courses and workshops. These programs are generally aimed at business, industrial, educational, professional and church organizations. Emphasis is given to the fields of communications, management study, computing, public policy and religion.

These programs are conducted through The Bethany College Leadership Center, Bethany's award-winning conference center which includes the Millsop Conference Center building, Gresham House lodge and Harder Hall educational and dining facility. The Center is another link between the College and the world at large and is used by business corporations, government agencies and non-profit organizations for their professional training and educational needs. The Center also provides opportunities for students, such as internships, practicums and employment.

Each summer, the Bethany campus and facilities are the site for camps for youth. These camps range from computers to a variety of sporting activities and include church groups and bands. Retreats and performing arts workshops are among other well-attended programs planned by or held at the College.



Educational Resources

Substantial resources are invested in the education of Bethany students. The gross assets of the College, on June 30, 1984, totaled \$40,509,852. Facilities and equipment at book value were \$22,351,607, with a replacement value of approximately \$35,939,798. The market value of all endowment funds was \$16,410,907.

More than 30 academic, administrative and residential buildings are located on the 1,600 acre campus.

The principal structures are:

Old Main (1858) is the centerpiece of Bethany's academic buildings. Its tower dominates the campus and is the chief architectural feature noted as one approaches the College. Old Main is listed in the "National Register of Historic Places." The building is one of the earliest examples of collegiate Gothic architecture in the United States. Old Main restoration work has been under way since 1977 with approximately \$2.5 million invested in the project.

Commencement Hall (1872) provides the setting for convocations, concerts, lectures, dramatic presentations and other gatherings. During 1983-1984, the Hall was restored to its original state.

Grace Phillips Johnson Visual Arts Center (1984) offers facilities for computer graphics, television, painting, sculpture and design. The Sandra Weiss Berkman Studio for Ceramic Arts is adjacent to the Center. The building was formerly Irvin Gymnasium (1919). Complete renovation accomplished during 1983-1984 makes this an outstanding facility for instruction in the visual arts.

Richardson Hall of Science (1964) provides contemporary facilities for the chemistry, physics and mathematics departments and houses the Academic Computer Center. It is named for Robert Richardson, Bethany's first science professor.

David and Irene Steinman Fine Arts Center (1969) provides excellent facilities for music and theatre. A fully-equipped theatre occupies the central portion of the building. Teaching studios, studio-classrooms, a general rehearsal room for the larger choral and instrument groups, and individual practice rooms support instruction in music.

Cramblet Hall (1905) was constructed through a gift from Andrew Carnegie. Originally the library, it was remodeled in 1961 to house Bethany's administrative offices. It is named in honor of two presidents of the College, Thomas E. Cramblet and his son, Wilbur.

Cochran Hall (1910) was built as a men's residence by Mark M. Cochran of the class of 1875. The interior of the building was completely remodeled during 1974-75 to serve as a faculty office and student conference center. Today it houses several academic departments and administrative offices of the College.

Oglebay Hall (1912) a gift of Earl W. Oglebay of the class of 1869, accommodates the laboratories and classrooms for the biology and psychology departments.

Pendleton Heights (1841) was built during the College's first year by W. K. Pendleton, a member of the first faculty and second president of the College. Today it serves as home for Bethany's president. Pendleton Heights is listed in the "National Register of Historic Places."

Renner Union-Bethany House (1948) is the student union. Here are found the campus radio station, the College bookstore, a student photographic darkroom, music listening rooms, a spacious lounge, and the Admission Office. The alumni joined in 1969 with the R. R. Renner family of Cleveland, Ohio, to remodel this facility.



Benedum Commons (1969) is the modern, air-conditioned dining facility for all Bethany students. In addition to the main dining room, the building houses a snack bar, lounge facilities and several small dining rooms for special student and faculty events.

John J. Knight Natatorium (1967) contains a six-lane, 25-yard, heated pool which is used in the physical education program and for intercollegiate competition. It is named for John J. Knight, long-time director of athletics. Four tennis courts are located next to the natatorium.

Alumni Field House (1948) provides physical education facilities for men and women. It is also used for concerts. Adjacent to the field house are football, soccer and baseball fields, tennis courts, and a quarter-mile track.

The T. W. Phillips Memorial Library (1959) contains nearly 155,000 volumes of books and bound periodicals with additional collections of microforms, pamphlet files, selected government documents and circulating art prints. Periodicals and newspapers from across the nation and throughout the world arrive daily. The Library has membership in the Pittsburgh Regional Library Center and the OCLC nationwide computerized network. The Library's Campbell Room contains books, periodicals, letters, paintings, photographs and museum pieces related to Bethany's Founder and first President, Alexander Campbell. Also located in the Library is the Media Center which provides instructional media materials, laboratories and production facilities.

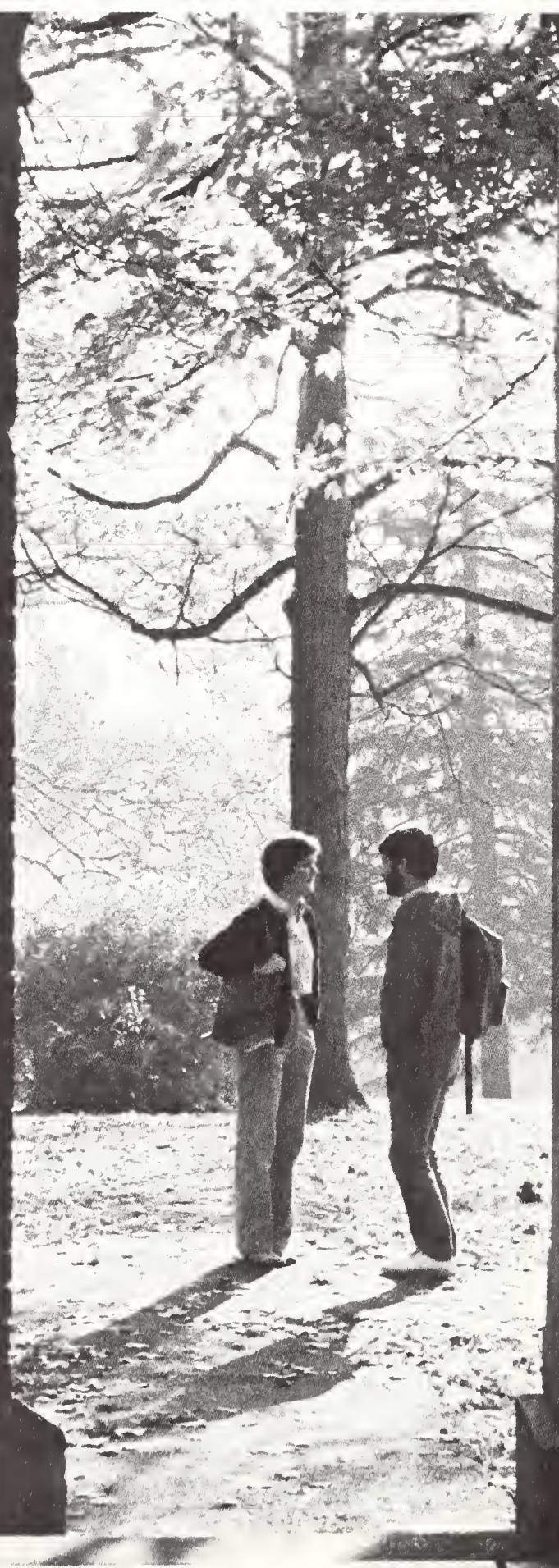
The Center for Academic Computing offers a wide variety of services from computer-assisted instruction and word processing to consulting services and classroom computer demonstrations. The Center's PRIME 750 computer is accessible from interactive workstations, including printing terminals and graphics terminal with copier. The facility supports text editing, system software packages, an educational software library and several programming languages. A separate microcomputing facility offers microcomputing training with application to graphics and automated instrumentation data collection.

The Leadership Center

Millsop Building (1972) is the world's first solarized satellite receiving center and houses offices, seminar rooms, exhibition areas, and a 123-seat circular conference room for continuing education activities. The center offers a regular series of conferences, seminars, and workshops for education, business, and professional groups. It is a memorial to Thomas E. Millsop, former president and chairman of the National Steel Corporation.

Gresham House (1972) is a guest facility which provides 40 rooms for overnight accommodations for visitors to the College. It is named for Dr. Perry E. Gresham, Bethany's twelfth president, and his wife, Aleece.

Harder Hall (1981) is an educational laboratory/dining facility. It adjoins Gresham House, the forty room overnight guest facility. It honors Delmar C. Harder, a pioneer in automation in the American auto industry.



College, Student Life

At Bethany, education is a total experience of living and learning. The College community offers a great variety of activities and students are encouraged to participate in those which best compliment their educational experience. Many opportunities for leadership experience are provided.

Bethany encourages the mature and responsible citizenship of its students. The College believes this citizenship is realized through measured personal freedom of each individual, as well as the community building efforts of students, faculty and administrators. College officials intervene when the rights and privileges of some are threatened by the actions of others.

Student Government

The Student Board of Governors, with representatives from all residence groups, manages a substantial budget and appropriates funds for a wide variety of student activities. Students are appointed to many faculty committees, including those concerned with curricula, athletics, religious life, international education, cultural and speakers' programs and others.

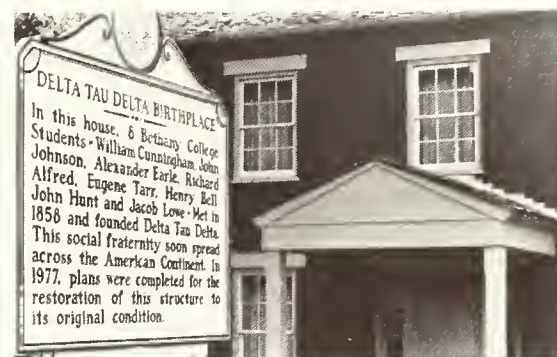
Residence halls help to shape the social life of the campus. Fraternities, sororities and house associations accommodate all upperclassmen in small, self-governed units. Students are responsible for their conduct; for academic, cultural and social programming; and for care of the facilities. Freshmen, soon after their arrival, organize and send representatives to student government.

Residence Life

Most Bethany residences are small living units accommodating 32 or 48 students and containing social and recreational facilities.

Freshmen live in somewhat larger residence halls but are granted many of the same freedoms and responsibilities of the upperclassmen. Head residents and student resident assistants give leadership and counsel to freshmen.

Phillips Hall, one of two freshmen women residences, is the most gracious residence hall on campus. Built in 1890, it was remodeled and restored in the late 1970s. The ground floor now houses a large, multi-purpose recreation room, Renner Too, and Maxwell's Coffee House and kitchen facilities.



Social, Fraternal Life

Fraternities, sororities and independent house associations constitute the primary social groups of upperclass men and women on campus. The six fraternities and four sororities are nationally affiliated and their members constitute approximately 65 percent of the student body. Representatives from each act as the coordinating agencies in fraternal affairs and activities.

Fraternities represented are Alpha Sigma Phi, Beta Theta Pi, Delta Tau Delta, Kappa Alpha, Phi Kappa Tau and Sigma Nu. Sororities are Alpha Xi Delta, Kappa Delta, Phi Mu and Zeta Tau Alpha.

The student-run College Union Program Board is responsible for much programming which includes a wide range of musical groups, from contemporary performers to opera and dance, and other cultural activities ranging from speakers to art and photographic exhibits.

In the past few years, Bethany programs centering on international business, American business and American politics have offered an array of distinguished speakers and visitors to the campus to meet with students as well as faculty. Leading these programs have been a former President of the United States, three United States Senators, two governors, a former Governor, an Ambassador, five corporate chief executive officers and a dozen or more leaders in the fields of public affairs, business and the arts and sciences. Each presentation has included social as well as seminar and workshop contact for students.

Other activities on campus which are well supported by student participation include theatre, various musical groups, intercollegiate and intramural sports and a score or more student-run clubs. The campus media – a weekly newspaper, yearbook, a magazine, a literary magazine, an FM radio station and a cable TV station – command much student interest and participation.



Religious Life

Many religious backgrounds are represented in the student body and faculty. While participation in religious activities is voluntary, there are many opportunities for religious participation on campus.

Many students find in Bethany Memorial Church an opportunity for expression of their religious faith. The minister of this church, who is also the College chaplain, is available to students for counseling and advice on personal and religious matters.

The Bishop of Wheeling-Charleston Diocese of the Roman Catholic Church provides a chaplain and chapel for Catholic students. He is available daily for counseling, in addition to the celebration of Mass each Sunday and on Holy days.

The Jewish fellowship meets for worship and study. Jewish congregations in Steubenville and Wheeling sponsor the fellowship and entertain Jewish students for the high holidays.

Student Regulations

A complete description of the regulations pertaining to housing, telephones, dining rooms, health services, motor vehicles, use of alcoholic beverages and drugs, eligibility requirements, and other areas of student life is contained in the *Student Handbook*. However, applicants for admission should know the following in advance:

- 1) The College expects and enforces lawful behavior in all matters. Particular emphasis is placed upon respect for the rights of others and upon other principles of good citizenship.
- 2) With the exception of commuters (i.e. married students or students living with parents) all students are required to live in College residence halls or fraternity or sorority houses unless excused by the Dean of Students.
- 3) All students, except commuters, are required to board in the College dining hall unless excused by the Dean of Students. No refunds are granted for meals missed.
- 4) Freshmen are not permitted to bring automobiles to Bethany unless the request is approved by the Dean of Students and the vehicle is properly registered.
- 5) Violations of regulations which are not adequately dealt with by the self-governing housing unit are judged or otherwise disposed of by the Dean of Students.



Intercollegiate Athletics, Intramurals, Recreation

Bethany College is a member of Division III of the National Collegiate Athletic Association. Women's and men's teams participate in the Presidents' Athletic Conference. Members of the Conference, in addition to Bethany, are Carnegie-Mellon, Grove City, Thiel, Washington & Jefferson, John Carroll and Hiram. Men's teams compete in baseball, basketball, cross country, football, golf, soccer, swimming, tennis and track. Women's teams compete in basketball, field hockey, softball, tennis, and volleyball, with individual opportunities for varsity participation in cross country, swimming and track.

Club sports teams provide intercollegiate competition opportunities in men's ice hockey, men's and women's lacrosse and women's soccer.

Recreation is provided for the entire student body through an extensive intramural and open recreation program. There is ample opportunity for students wishing to pursue everything from archery to rafting, backpacking to jogging and team sports.

Facilities on campus and nearby offer opportunities for football, racketball, softball, baseball, basketball, volleyball, soccer, tennis, swimming, golf, cross country, track, table tennis, bowling, wrestling, badminton, horseback riding, body mechanics, dancing, gymnastics, aerobics, skiing, jogging, camping, hiking and nature study.

Student Health Services

All students entering Bethany for the first time are required to submit a completed physical examination form before registration. The College health service is maintained by student fees, and all students are entitled to nursing service and specified access to a physician. A minimum charge for prescription medicines, ointments or injections may be added to the student's account.

The Bethany infirmary is on 24-hour call for illnesses and injuries which occur during the academic year. Service is not available at the infirmary during vacations and recess periods. Students who suffer serious illnesses and accidents are usually treated at the Wheeling Hospital, located 15 miles from the town of Bethany. Ambulance service for emergencies is available.

The College physicians have regular office hours during the week for free consultation. In case of an emergency operation, when the parents cannot be reached, the Dean of Students, upon the recommendation of the College physician, assumes the responsibility of giving permission for treatment.

Bethany provides medical, surgical, and hospitalization insurance. All students are automatically included in the coverage from September 1 to August 31 and are charged accordingly unless the appropriate waiver is forwarded to the Business Office. Expenses for outside consultation and treatment are the responsibility of the student in all cases when not covered by insurance.



Scholarships, Recognition Awards

Bethany recognizes promise and intellectual attainment by awarding a large number of scholarships. These awards vary in value and are available to a limited number of entering students. Most scholarships are awarded to freshmen on a four-year basis but are continued from year to year, only if the recipient has met the following conditions:

- A satisfactory scholarship index
- Satisfactory conduct as a student
- Worthwhile contributions to the College program
- Constructive citizenship in the College community
- Payment of student accounts as scheduled

Each fall, Bethany holds the **Competitive Scholarship Opportunity**, a program which offers tuition grants, regardless of financial need, in areas of social sciences, physical and life sciences and the humanities. These scholarships are awarded on the basis of performance on a competitive examination, secondary school record, standardized test scores and personal qualities.

Each spring, Bethany offers its **Kalon Leaders Program** in which participants vie for four-year tuition grants, also regardless of financial need. Selection is based upon past leadership achievements, secondary school record, a required essay and references. Candidates are interviewed by Bethany faculty and the results of these interviews are used in the selection process.

Bethany offers a wide range of scholarships, designated and external trust scholarships as well as sustained awards and loan funds.

These awards, most named for distinguished alumni and faculty members and friends of the College, are awarded to worthy and eligible students. Some are designated for specific fields and interests.

Awards are made by the President and by the Scholarship and Financial Aid Committee in accordance with the requirements of a particular endowed fund.

A complete listing of all scholarships is available from Bethany's Office of Development, the Office of the Dean of the Faculty, and the Office of the Dean of Students.

Achievement Recognition

Bethany encourages achievement in scholarship and leadership in student affairs by public recognition at Commencement, Honors Day and on other suitable occasions.

Graduation Honors

Students who have done academic work of unusual merit are graduated with honors: *Summa Cum Laude* (3.85), *Magna Cum Laude* (3.65), or *Cum Laude* (3.35). The awarding of honors is determined upon the basis of total quality points earned, standing in the Senior Comprehensive Examination, and the recommendation of the student's advisor.

Senior Fellowships

Certain members of the junior class may be designated as senior fellows for the following year. The selection is made from students who have demonstrated unusual excellence in their field of concentration and who, by character and ability, can do special work in a department or area as an assistant in instruction or research.

Usually no more than 12 full-year senior fellowships and one senior fellowship *at-large* (or the equivalents) are awarded in any one year. Usually no more than one full-year appointment (or the equivalent) will be made in any one department or area. Although the title of *senior-fellow-at-large* is provided primarily for capable students involved in interdisciplinary programs, students in other fields of concentration may be nominated for this category.

The selection of senior fellows is made by the Honors Committee from nominations usually presented by department heads.

Dean's List

At the end of each semester, students who have rated high academically (grade point average of 3.65 or better) and have completed at least 12 graded hours during the semester are designated as "Students Distinguished in Scholarship." Often called the Dean's List, this distinction is determined by the Honors Committee.

Honor Societies

A number of honor societies have been established at Bethany through the years to recognize academic achievement and campus leadership.

Gamma Sigma Kappa is a scholastic society founded at Bethany in 1932. Students who have achieved a cumulative scholarship index of at least 3.70 (over at least four consecutive semesters and provided that in no semester their scholastic index falls below a 3.00 and provided the student has completed at least 12 graded hours in each of the semesters) may, upon recommendation of the Honors Committee, be considered for membership. Usually, however, not more than 10 percent of any class will be recommended.

Bethany Kalon is a junior and senior society established in 1948 to give recognition to students of high character who have demonstrated competent and unselfish leadership in student activities and have been constructive citizens of the College community. Selection is made by the members of the society with the advice and approval of the Honors Committee.

Alpha Phi Chapter of Beta Beta Beta is for students of the biological sciences. Its purpose is to stimulate sound scholarship, to promote the dissemination of scientific truth, and to encourage investigation into the life sciences.

Alpha Beta Gamma is an honorary organization in education dedicated to recognizing and fostering professional concern, involvement, and experience in education.



Gamma Upsilon Chapter of Lambda Iota Tau. Lambda Iota Tau is an international honor society for the encouragement and reward of scholastic excellence in the study of literature. Membership is limited to juniors and seniors who have a cumulative scholarship index of 3.0, who have completed a minimum of 12 semester hours of literature courses with at least a 3.0 grade-point average in them and in all prerequisite courses, and who have presented a scholarly, critical, or creative paper which has been accepted by the chapter. The chapter presents an annual award for the best senior project in literature. Lambda Iota Tau is a member of the Association of College Honor Societies.

Alpha Chapter of Omicron Delta Epsilon, an international honor society in economics, was established in 1960 to recognize excellence in the study of economics. Membership is limited to students who have completed a minimum of 16 semester hours of economics, including either Economics 301 or 302, and who have achieved both a departmental and overall grade-point average of 3.25 or better.

Beta Gamma Chapter of Alpha Psi Omega. Alpha Psi Omega is a national recognition society in dramatics. Students qualify by faithful work in playing major and minor roles or working with technical or business aspects of theatre.

Mu Epsilon Chapter of Phi Alpha Theta was established at Bethany in 1967 to recognize excellence in the study of history. Its membership is limited to those students who have completed at least 12 hours of history with a grade-point average of 3.1 or better and with at least a 3.0 grade-point average in two-thirds of all other studies. Members must also rank in the upper 35 per cent of their class.

Bethany Chapter of the Society for Collegiate Journalists, a national recognition society in journalism, is designed to stimulate interest in journalism, foster the mutual welfare of student publications, and reward journalists for their efforts, service, and accomplishments.

Kappa Xi Chapter of Sigma Delta Pi is an honor society for those who attain excellence in the study of the Spanish language and the literature and culture of the Spanish peoples. Students who are at least second semester sophomores and have a high scholastic index and who have completed at least one advanced course in Spanish literature are eligible for membership.

Epsilon Chi Chapter of Kappa Pi is for students of graphic arts. Its purpose is to uphold the highest ideals of a liberal education, to provide a means whereby students with artistic commitment meet for the purpose of informal study and

entertainment, to raise the standards of productive artistic work, and to furnish the highest reward for conscientious effort in furthering the best interest in art in the broadest sense of the term.

Alpha Chapter of Kappa Mu Epsilon, a national honor society in mathematics, was established in 1975 to recognize outstanding achievement in mathematics. Its membership is limited to those students who have completed at least three semesters at Bethany, rank in the upper 35 per cent of their class, have completed at least three mathematics courses, including one semester of calculus, and have a grade-point average of 3.0 or better in all mathematics courses.

Kappa Tau Lambda music honorary promotes greater participation and appreciation of music by encouraging attendance at recitals, sponsoring field trips to concerts and providing an opportunity for students of music to meet and exchange ideas. The honorary also encourages greater participation in College musical groups and solo recitals while upholding high standards of musical performance. Qualifications for membership include at least a 3.0 average in eight or more hours of music.

Phi Delta Psi is a physical education honorary for both men and women which encourages scholarship, leadership, fellowship, high educational standards and participation in departmental activities. To be eligible, students must be at the second semester level of the sophomore year and achieve a grade point average of at least 3.0.

Pi Gamma Mu is a social science honorary for men and women who have achieved high academic standing in the study of history, economics, political science, sociology and geography. A 3.0 average in at least 20 hours of study in these fields and standing in the top 35 percent of their class are required for membership.

Awards

Oreon E. Scott Award is presented to the graduating senior who has achieved the highest academic record over a four-year period of study. The donor of this award was a long-time Bethany trustee and a graduate of the class of 1892.

Anna Ruth Bourne Award stimulates scholarship among the women's social groups. A silver cup, provided by an anonymous donor in honor of the former distinguished head of the English department, is awarded to the recognized women's group whose active membership earns the highest scholarship standing each semester. The group winning the cup for four semesters is presented with a smaller replica as a permanent trophy.

W. Kirk Woolery Award encourages scholarship among the men's social groups. A silver cup, donated by friends of the late Dr. Woolery, a former Dean and Provost of the College, is held by the recognized men's social group or housing organization whose membership (active membership only in the case of fraternities) earns the highest scholarship standing each semester. Any group winning the cup for four semesters is presented with a smaller replica as a permanent trophy.

The Beta Beta Beta – B. R. Weimer Award, established in honor of the late Bernal R. Weimer, Professor of Biology and Dean of the Faculty, is given each year to the senior in biology who has attained the highest academic rank in this field of concentration.

The Beta Beta Beta Prize is awarded the student who has received the highest grades in the initial courses in biology.

Florence Hoagland Memorial Award, given by a graduate of the class of 1944, is presented to the outstanding senior English major. The award honors the memory of the late Miss Hoagland who was for many years Professor of English at Bethany.

Christine Burleson Memorial Award, given by a graduate of the class of 1936, is presented to a senior English major who has attained excellence in this field of concentration. The award honors the memory of the late Miss Burleson who was Professor of English and Dean of Women from 1932 to 1936.

Cammie Pendleton Awards, named in honor of Miss A. Campbellina Pendleton, Professor of Language and Literature at Bethany from 1884 to 1909, are presented to the outstanding junior and sophomore concentrating in English. The awards are given by Dwight B. MacCormack, Jr., of the class of 1956, in memory of his grandmother, Dr. T. Marion MacCormack.

E. E. Roberts Distinguished Prize in Campus Journalism is awarded to an outstanding student who excels in work with one of the student media, in academic work in the Department of Communications, or both.

Winfred E. Garrison Prize is presented in recognition of outstanding achievement in one or more areas of philosophy. The award honors the memory of the late Dr. Winfred E. Garrison, a member of the class of 1892, whose humane concerns and scholarly achievements contributed significantly to the area of higher education, history, and philosophy.

Outstanding Junior Woman Award is provided by the Pittsburgh Bethany College Club, comprising the Bethany alumnae of Pittsburgh. This award is based on qualities of leadership, character, conduct, and scholarship. The club has placed a suitable plaque in Phillips Hall on which names of the winners are engraved. In addition, an individual gift is made to the recipient.

Vira I. Heinz Award is granted to the junior woman who has distinguished herself by leadership, character, conduct, and scholarship and whose proposal for foreign travel most significantly supplements her educational objectives. This award for summer travel is provided by the fund of the late Vira I. Heinz, recipient of the honorary Doctor of Religious Education degree from Bethany in 1969.

Benjamin Chandler Shaw Travel Award is granted to the junior man who has distinguished himself by leadership, character, conduct and scholarship and whose proposal for foreign travel most significantly supplements his educational objectives. This award is funded by an anonymous friend of the College in recognition of the late Dr. Shaw, Bethany's George T. Oliver Distinguished Professor of History and Political Science Emeritus. Dr. Shaw joined the Bethany faculty in 1935, served from 1945 to 1966 as head of the Department of History and Political Science and continued part-time until 1975.

Bettie Blanck Travel Award is made to the student whose proposal for foreign travel best promises to augment study in English literature. The award was established by Thomas A. Hopper, class of 1967, in honor of his mother, a member of the Class of 1944.

W. F. Kennedy Prize is given to the outstanding young man in the junior class. This award, established by W. F. Kennedy of Wheeling, West Virginia, is awarded on the basis of the student's contribution to the College community life through leadership in activities, in personal character, and scholarship.

Pearl Mahaffey Prize is awarded to the outstanding senior major in Languages. The award was established by Mrs. Walter M. Haushalter and other former students of Bethany's emeritus professor of foreign languages. The prize honors Miss Mahaffey, a faculty member from 1908-1949 and a trustee of the College at the time of her death in 1971.

Shirley Morris Memorial Award was established by Theta Chapter of Zeta Tau Alpha in memory of Shirley Morris, a loyal member and past president of the chapter. It is given to an outstanding student in the field of modern languages. Selection is made by the Department of Foreign Languages.

Margaret R. Woods Prize, sponsored by the Kappa Xi Chapter of Sigma Delta Pi, is awarded to the outstanding Spanish major. The prize honors Miss Woods who was a faculty member from 1943 until her retirement in 1965. Selection is made by the Department of Foreign Languages.

Auguste Comte Award is presented to the senior of the Sociology Department for outstanding scholarship and keen interest in the field. The award is named after the founding father of the discipline.

Charles H. Manion Award is made to the outstanding senior in Fine and Applied Arts with an emphasis in one of the Art areas. The award memorializes Charles H. Manion, long-time trustee of

Bethany College who was associated with the steel industry in the Ohio Valley and who enjoyed painting. The prize is provided by his daughter, Mrs. Leonard Yurko, Weirton, West Virginia.

Theodore R. Kimpton Prize is awarded to the outstanding French student. This prize, which is restricted to those students whose native language is other than French, was established by Theodore R. Kimpton, assistant professor of foreign languages at Bethany prior to his retirement from full-time teaching in 1975.

George K. Hauptfuehrer Award in Music is co-sponsored by the Music Society and Kappa Tau Lambda in honor of George K. Hauptfuehrer, Professor of Music and Head of the Department of Music Emeritus. The award is presented to the Bethany student who has demonstrated musical excellence and has participated actively in campus musical organizations. The award is open to both majors and non-majors, with preference given to upperclassmen.

J. S. V. Allen Memorial is a fund established by the family and friends of Professor Allen to provide for an annual award to the outstanding physics student.

Frank Alfred Chapman Memorial is a fund established by Dr. Stanton Crawford to provide for an annual award to the outstanding history student. Preference is given to students of American history and the Ohio Valley.

Osborne Booth Prize is given to the student who excels in the field of religious studies and in the overall academic program. The late Osborne Booth was T. W. Phillips Professor of Old Testament when he retired in 1964 after 35 years of teaching at Bethany.

Francis O. Carfer Prize is given to the senior who, in the judgment of the Honors Committee, has made the most outstanding contribution to the College. Mr. Carfer, a trustee of Bethany College for 29 years, was a graduate of the class of 1909. Recipients of the award must display sound academic accomplishments and characteristics of loyalty, service, and devotion to Bethany.

W. H. Cramblet Prize recognizes outstanding achievement in mathematics. It is named in honor of Wilbur H. Cramblet, the eleventh president of Bethany College.

John J. Knight Award is presented to the senior male Physical Education major displaying outstanding scholarship and athletic participation during his four years at Bethany.

S. Elizabeth Reed Award is presented to the senior woman showing outstanding scholarship and athletic participation during her four years at Bethany.

Frank Roy Gay Award, established in 1982, is given to the senior interdisciplinary major who maintains a grade point average of 3.5 or above and displays outstanding leadership qualities in the Bethany community. The award is named for the former Professor of Classics at Bethany who taught English literature, religion and philosophy.

A. Kenneth Stevenson Theatre Award is presented each year to the outstanding Bethany junior or senior of any discipline with a grade point average above 3.2 who has contributed

the most significantly to Bethany College Theatre activity. The award also provides for guest artists to enhance the program in Theatre. A. Kenneth Stevenson of Washington, Pa., was a long-time supporter of the Bethany College Theatre program until his death in 1979. Mrs. A. Kenneth Stevenson, her sons, Drew and Mark, both graduates of Bethany, and members of the Department of Fine and Applied Arts make the yearly selections.

Forrest H. Kirkpatrick Award is presented annually to the outstanding senior concentrating in economics and business. The award is named in honor of Dr. Kirkpatrick, long-time dean of the College who is currently serving as adjunct professor of economics.

The Rush Carter Prize in music is presented to a member of the senior class in recognition of outstanding achievement in music. The prize honors the memory of the late Professor Carter who was a member of the Bethany faculty from 1934 to 1945.

The Edna W. Woolery Bibliography Prize is awarded to a senior student and to a freshman student who have individually compiled a bibliography and who request that it be considered for receiving the award. Edna W. Woolery was a Librarian at Bethany during the 1950s. In the event that the Award, established in 1981, is not granted in any year, the funds are used to purchase Library books. Additional information is available from the Librarian.

Wall Street Journal Award is given to the student majoring in Economics who has the highest average in select department courses and has shown strong participation in departmental activities.

Senior Chemistry Award is granted to the senior concentrating in chemistry who has achieved the highest cumulative average in the Department, including the record made on the Senior Comprehensive Examination.

The Thomas R. Briggs Award is presented annually to the senior in psychology who has maintained the highest academic average in the department. The award is a memorial to the late Thomas R. Briggs, Class of 1978, recipient of the Psychology Society Award in 1978.

Society for Collegiate Journalists Award of Merit is presented to an upperclass writer or editor for significant contributions to campus student publications.

WVBC-FM Senior Award is given to the senior who for four years has lent qualities of dedication, loyalty, leadership, talent, and creativity to WVBC's operations.

WVBC-FM Talent Award is presented to the member of the WVBC staff who has offered the most outstanding continuous radio programming during the year.

Freshman Writing Prizes, provided by alumni and awarded by the Department of English, are given annually to authors of the best essays written in Freshman Seminars. Each seminar leader submits the two best essays from the group and the winning essays are determined by a panel of judges.

Research Awards

The Gans Fund Awards are presented to juniors, seniors and graduates of the College who are engaged in approved study and research in some specific field of the sciences at Bethany College or elsewhere. The direct charge is "for the encouragement of research and discovery in the various fields of science." The awards were established by Wickliffe Campbell Gans of the Class of 1870 and Emmet W. Gans in memory of their father and mother, Daniel L. and Margaret Gordon Gans.



Academic Procedures

Course Load

A normal semester load is 16 hours. A student may elect activities courses such as music, chorus, band, physical education, up to two hours with no additional fee charge, making the maximum academic course load 16 hours plus two hours of activities courses. Permission to take additional courses must be obtained from the Dean of the Faculty. Fees will be charged for any such approved courses. Applications for excess hours are available in the Registrar's Office.

A full-time student is defined as any student carrying at least 12 hours per semester.

Independent Study

Each department offers independent study for those students who have demonstrated the ability to work individually in some area of special interest. The student selects an area of study, subject to the approval of the head of the department, after which he or she completes an Application for Independent Study in the Registrar's Office before the start of the semester.

Cross-Listed Courses

When a course which is part of a department's *requirements* for its field of concentration is cross-listed, a student concentrating in that field may register for the course in any department in which it is cross-listed, but the course will count as part of the maximum credit which may be earned by the student within the department of his or her field of concentration.

Course Offerings

Most courses listed in departments are offered annually. Many, however, are offered every other year and a few are offered in three-year cycles. Students should see respective department heads for long-range course planning.

Grading System

Letter grades given and their equivalents in quality points are:

A	4.00
A –	3.75
B +	3.25
B	3.00
B –	2.75
C +	2.25
C	2.00
C –	1.75
D +	1.25
D	1.00
D –	.75
F	.00

Students are required to take at least 100 hours of letter-graded work.

Grades mean: A, *Superior*; B, *Excellent*; C, *Average*; D, *Below Average*; F, *Failure*.

Other report abbreviations and their meanings are:

Cr. *Credit*. No quality points.

NCr. *No-Credit*. No quality points or academic penalty.

F. *Failure*. No quality points; denotes work that is unsatisfactory.

Inc. *Incomplete*. Incomplete work is a result of sickness or some other justifiable reason. An incomplete must be removed by the end of the fourth week of the following semester, unless an extension of time is granted by the Dean of the Faculty. It is not possible for a student to remove an incomplete after 12 months.

W. *Withdrawn*. No penalty.

WF. *Withdrawn failing*. No quality points; indicates a course dropped with permission after the fifth week of the semester, with the student failing at the time of withdrawal. A grade of WF has the same effect on the student's grade-point average as an F.

Any student who carries 12 hours of letter-graded academic work may elect to take additional work on a Credit-No Credit basis in courses which are not used for the field of concentration or the Perspectives Program or a Professional Core.

A report of the scholastic standing of students is received at the Registrar's Office at mid-semester in addition to the final semester reports. These reports are sent to the faculty advisor and the parents or guardians of each student.



Classification of Students

For sophomore rank a student must have at least 25 hours of academic credit. Admission to full junior standing is conditioned upon the student having at least 60 hours of academic credit. For senior class rank the student must have at least 94 hours of academic credit.

Students are not considered candidates for the baccalaureate degree until they have been granted senior classification, have filed an application to take the Senior Comprehensive Examination in their field of concentration, and have filed an application for a degree.

Change of Schedule

During the first five class days of each semester, a student, with the approval of the advisor, may drop or add any course. No classes may be added after this time. With proper approval, a student may drop a course any time before the final.

Class Attendance Policy

Students are expected to attend all classes and appropriate laboratory meetings of a course and to participate in all outside activities that are a part of the course.

It is the responsibility of individual instructors to evaluate the importance of participation in determination of course grades. Students and faculty should demonstrate concern for each other in attendance matters. The Dean of Students grants excused absences in the event of serious, personal or family emergencies or authorized college events.

Special Examinations

A student justifiably absent from a final examination or a test given in connection with regular class work is permitted to take a special test without payment of fees with the consent of the instructor and approval of the Dean of the Faculty. For any other examination a fee must be paid at the Business Office before the examination is taken, and the proper receipt must be presented to the instructor at the time of the examination.

Probation

The term "on probation" is applied to students who are allowed to continue at Bethany after having failed to meet the standards expected by the faculty and administration. Students may be placed on probation for any of the following causes:

- 1) Unsatisfactory scholastic record. The following academic basis will be used to determine probation each semester: Freshmen must achieve at least 1.7, Sophomores 1.8, and Juniors and Seniors 2.0.
- 2) Unsatisfactory class attendance during the semester or preceding semester.
- 3) Unsatisfactory conduct at any time.

Probation is intended to be a warning to students (and to their parents or guardians) that their record is unsatisfactory and that unless significant improvement is made they will be asked to withdraw from the College. At the end of a semester on probation the student's total record is reviewed. Continued enrollment depends upon the trend of academic performance. The Policy Appeals Board may dismiss any student if the student is not likely to meet the requirements for graduation in the usual period of four years. An extension of the four-year period is granted only when there are extenuating circumstances.

Withdrawal

An honorable dismissal is granted to students in good standing who may desire to withdraw from the College if they have satisfied their advisor and a responsible officer of the College that there is a good reason to justify such action. Students asking to withdraw should present a written request to the Dean of Students along with a statement of approval from parent or guardian. The recommendation of the Dean of Students is next presented to the Business Manager and then to the Registrar for final record. No withdrawal is considered complete until this procedure has been carried out.

Transcript of Records

Students wishing transcripts of records in order to transfer to other schools or for other purposes should make application to the Registrar's Office at least one week before the transcript is needed. Transcripts are issued only at the request of the student, and official transcripts are sent directly to the college or university specified by the student. One transcript is furnished to each student without charge; for each additional transcript a fee of \$1.00 is charged. When three or more transcripts are ordered at the same time, the first transcript is \$1.00, whereas the others cost \$.50 each. Fees must accompany the request. All financial obligations to the College must be paid before a transcript is issued.



Invalidation of Credits

Courses completed at Bethany or elsewhere, more than 10 calendar years before the date of proposed graduation, are not accepted for credit toward graduation. All candidates are expected to comply with degree requirements in effect at the time of acceptance of the degree application. With the approval of the Policy Appeals Board and the payment of the required fee, the candidate may take examinations, as administered by the various departments, for courses included in the current curriculum, to reinstate academic credit that may have been declared invalid because of date.

Policy Appeals Board

The faculty members who sit on the Policy Appeals Board evaluate student requests for exceptions to regular academic policies and regulations. Student requests are submitted in writing and should include the advisor's recommendation.

Changes in Regulations

Bethany reserves the right to amend the regulations covering the granting of degrees, the courses of study, and the conduct of students. Membership in Bethany College and the receiving of its degrees are privileges, not rights. The College reserves the right (and the student concedes to the College the right) to require the withdrawal of any student at any time.

Curriculum Index

Professional Core Programs	43
Freshman Studies	44
Accounting	45
Astronomy	46
Biology	47
Chemistry	49
Communications	51
Communications Design	53
Computer Science	54
Economics and Business	56
Education	59
English	67
Fine and Applied Arts	72
Foreign Languages	75
General Sciences	79
Geography	79
Graphics	79
Health Science	80
Heuristics	80
History	81
Interdisciplinary Studies	84
Library	85
Mathematics	86
Philosophy	88
Physical Education	90
Physics	95
Politics and Public Policy	98
Psychology	100
Religious Studies	103
Science Applications (Honors)	106
Social Sciences	106
Sociology and Social Work	107



Professional Core Program

The Professional Core Program is an option for every Bethany student. In electing a field of concentration, as well as a Professional Core, students broaden their possibilities for employment and their options for graduate or professional study.

Professional Core programs are available in:

- **Management**
- **Public Affairs (Public Policy/Administration)**
- **Communication (Marketing or Electronic Media)**
- **Science and Technology (Computing or Pre-Professional Science)**

Management: to assist students in describing and determining the roles, reactions and relationships of individuals and groups within a management structure. Students completing this Core should have the capacity to enter a management position in business, public agencies, schools and other organizations with a higher level of understanding and skill in dealing with management issues. Required are 18 hours: Accounting 211, Economics 200 and 280, Psychology 287, Computer Science 100. Six hours are to be taken from Economics 111, 286; Communications 302; Computer Science 140, 144; Politics and Public Policy 227, 300; or Sociology 309.

Public Affairs: to become knowledgeable about the nature of problems in the broad area of public affairs and to be able to deal with issues of public policy and public administration. Completion should enable the student to have a basic capacity to analyze and assess public policy issues and needs, to implement and administer public policy programs, to develop public policy plans and to evaluate public programs. Required are 18 hours: Politics and Public Policy 231, 232, 300; Economics 200, and Computer Science 100. An additional four hours are to be taken from Politics and Public Policy 331, 332; Economics 280, 302; Sociology 205, 309; Psychology 287; Mathematics 281; Communications 402; or Computer Science 140, 144.

Communication: to develop the student's facility to understand and to use techniques of effective communication to wide audiences. Within this core, two options are available, one in Marketing and the other in Electronic Media. Marketing focuses on a variety of communication needs within the world of business and industry. Electronic Media focuses on radio and television as media for mass communication. For Marketing, required are 24 hours from Communications 101, 301, 302; Economics 111 and 290; English 205; Psychology 287. For Electronic Media, required are 22 hours from Communications 101, 201, 261, 271, 304, 310, 311 and Fine and Applied Arts 404.

Science and Technology: to provide a basic knowledge in one of two areas, Computing and Pre-professional Health Science. The Computing option aims at providing a working knowledge of computers, especially as related to the student's regular field of concentration, thus providing job-entry skills not typically available to those studying in traditional liberal arts fields. The Pre-professional Health Science option provides a basic science education for those interested in pursuing health-related professions, including those seeking entrance to schools of medicine,



veterinary medicine professional schools. This curriculum provides the basic elements of what is usually expected of applicants to such schools.

In Computing, 14 hours are required from Computer Science 100, 201, 202, 450; plus any one of the following: Computer Science 140, 142 or 144. In Pre-professional Health Science, 40 hours of course work grouped from Animal Biology, General Chemistry, Organic Chemistry, Physics, Calculus, English. Specific courses should be carefully selected in consultation with the student's advisor and the Health Science Committee and students selecting Pre-professional Health Science must submit a separate list of courses included in their program as worked out with advisors.

Course Descriptions

Freshman Studies

Interdisciplinary Lecture 100 **The Origins of the Modern Western World** 4 hours

This course centers on the modern world and its origins and stresses the basic ideas, historical events, aesthetic styles and primary writings which have shaped the modern world.

Freshman Seminar 4 hours

Sec. A Hatfields and McCoys: Appalachian Myths, Legend, and Reality

This seminar represents a humanistic and social scientific venture in a regional community study. It takes advantage of West Virginia's unique position as a laboratory for such inquiry. It explores such factors as ethnic patterns and diversities, struggles for modernization, demographic trends, and socio-cultural attitudes. Students will explore the myths, legends and realities of Appalachia through selected Appalachian literature, films, field trips and craft activities. (*Lynn Adkins, Professor of Sociology and Social Work*)

Sec. B Exploring Christian Worship

This seminar will study the development and a variety of ways people have worshipped throughout the history of the church. The investigation will begin with a survey of the Jewish roots of Christian worship and include an examination of the ways people worship God today. (*William B. Allen, College Chaplain*)

Sec. C Crime and Its Detection

A study of crime fiction and film from Conan Doyle to the present. Emphasis on crime fiction as intellectual puzzle, social commentary, and metaphor for the age. Students will examine works by Doyle, Kafka, Chandler, John D. MacDonald and others. They will also engage in simulation games and a mock trial. (*Larry E. Grimes, Professor of English*)

Sec. D The Human Struggle Through Sport

This seminar explores through the medium of sport literature the impact of sport on society and self. In it, students will examine the social and psychological effects on participants and consumers of sport through study of fiction, essays and poetry having a sport motif. Topics include racism, sexism, love, death, age and winning. (*James E. Allison, Associate Professor of Mathematics*)

Sec. E Adapting Fiction for Stage and TV Production

Students will read short American Southern fiction for the purpose of adapting the works to serve as play or TV scripts to be performed in live or taped productions. The course emphasizes sound reading, effective script writing, and inventive production responsibilities, i.e., direction, and/or performing, designing or producing. (*David J. Judy, Professor of English and Theatre*)

Sec. F No High Ground: The Superpowers in the Nuclear Age

The course will explore two basic themes, interrelated and converging. First, the origins, development, and conduct of the Cold War, and second, the development of nuclear weapons and their impact on superpower diplomacy. (*Gary Kappel, Instructor of Theatre and History*)

Sec. G Crime and Punishment

A study of the nature and causes of criminals and crime followed by an examination of systems of punishment and rehabilitation will constitute the major activity of this course. Students will also tour prisons and briefly intern in a prison if arrangements can be made (this is a big if). (*John W. Lozier, Associate Professor of History*)

Sec. H The Computer: Fact and Fiction

This seminar seeks to introduce students to computers and computing and to examine some of the implications of computers for human culture and thought. In pursuit of these goals, seminar members will learn elementary programming, will learn to use computerized text editing, and will publish a weekly, computerized newspaper for freshmen, *Fresh News*—while readings will range from technical articles to science fiction. (*J. Trevor Peirce, Professor of Psychology*)

Sec. I Education of the Self

Exploration of three areas considered crucial to personal adjustment and growth: the self-concept, relationships and communication, and a meaningful philosophy of life. Through readings and group discussions it is hoped that students will leave the seminar with a greater understanding and acceptance of self and others. (*T. Gale Thompson, Professor of Psychology*)

Sec. J This Old House

This seminar will study old mansions and other historic houses in the local region as an introduction to American architectural history and as a means of discerning the cultural, social and economic forces which shape a region. Students will tour restored houses, analyze the architecture of a neighborhood, visit restoration architects working in the field, survey the history of American residential styles and learn how to discover the story of a house. At least one trip to a historic village is planned. Each student will prepare a photographic and written analytic report of an important historic structure or site. (*Hiram J. Lester, Professor of Religious Studies*)

Sec. K Sensitivity to the Natural World

This seminar is an introduction to the natural world based upon the observations of plants and animals in the natural settings. Most sessions will be held outdoors at Bethany and at several nearby, important natural sites. (*Albert R. Buckelew, Jr., Professor of Biology*)

Sec. L Ethical Issues in the News

A study of contemporary public issues with ethical dimensions, such as animal and artificial organ transplants, search and seizure laws, equality of educational opportunities. Students will research and examine these issues through readings, writings, debates, interviews, and surveys. Students will examine the ethical dimensions of some historical issues (for example, Prohibition, the civil rights movement), but emphasis will be on issues current to fall, 1985. (*Robyn R. Cole, Assistant Professor of English*)

Sec. M Heroes and Heroines

The concept of "hero" is a phenomenon common to all cultures and societies throughout history. This figure, either fictional or real, represents a complex of attitudes and attributes which define characteristics essential to the nature of particular cultures and societies. This course analyzes contemporary hero figures as well as those from the past, and investigates the constant elements associated with heroes, as well as how and why the heroic figure changes from society to society and from age to age. (*John R. Maier, Associate Professor of Foreign Language*)

Sec. N The Old Order Amish: Exploration of a Culture

The seminar views the Older Order as a living attempt to control the shape and direction of a society. We will examine Amish history, practices, and ideology not only to achieve a better understanding of this unique people but to more clearly apprehend the character of contemporary American culture as well. The seminar also concentrates on strengthening the student's ability to carry out independent research, in the field and in the library. (*Marc A. Olshan, Assistant Professor of Sociology*)



Sec. O William Golding and the Problem of Evil

A study of six novels by the 1981 Nobel Prize winner for literature. By analysis and comparison, the seminar will try to determine what Golding has to say about the nature of man and his problems. (*John R. Taylor, Professor of English*)

Sec. P Graphically Speaking

This seminar will help students understand and produce graphics in order to communicate through pictures. Specifically, members of the seminar will learn to use computers to produce graphics, will publish a graphical addendum to *Fresh News*—the computerized freshman newspaper—and will read and write about graphics communications and the computer. (*Edwin Goldin, Professor of Physics*)

Sec. Q Landmark Experiments in Science

The basis for our present understanding in physics, chemistry, biology and the other sciences is modern atomic and molecular theory. This theory has evolved since ca: 1800 due mainly to fewer than twenty ingenious experiments. Students in this seminar will have the opportunity to perform several of these classical experiments and at the same time explore the historical, philosophical and scientific implications of each. **This seminar is recommended for students in Honors Science Applications.** (*Milton R. Smith, Associate Professor of Chemistry*)

Accounting

Aims

The accounting program develops an understanding of the functions of accounting, the principles that constitute accounting theory, and the applications of these principles in processing financial information necessary to all economic organizations. The field of concentration in accounting prepares individuals to enter a wide variety of accounting specialties and management positions and to sit for the Certified Public Accountants Examination with an especially strong preparation for its "practices" and "theory" parts. The program also serves as sound preparation for work in government, law, policy planning, and graduate study.

Requirements for Field of Concentration

Forty-six hours in accounting exclusive of the senior project. Required courses are Accounting 211, 212, 312, 313, 314, 330, 352, 415, 425, 441, 461, and 477. Related requirements are Economics and Business 200, 301, and 302, Mathematics 201 and 281, and Computer Science 144. Students concentrating in Accounting are limited to a maximum of 12 hours in Economics and Business beyond the required courses (Econ. 200, 301, and 302). Students concentrating in Accounting are expected to attain a minimum grade of "C" in all courses in the program. If a student receives a grade lower than a "C," the student must arrange an interview with the Head of the Economics and Business Department prior to taking additional upper-level courses.

Acct. 211 Principles of Accounting I 4 hours

Introduces principles and procedures accounting uses to process financial information of various business organizations and to present their Income Statement and Statement of Financial Position to external users of the organizations' financial information. Studies the accounting system's methods of collecting financial information, analyzing it, measuring it, recording it, processing it, and finally presenting it.

Acct. 212 Principles of Accounting II 4 hours

Continues introduction of accounting principles and procedures begun in Accounting 211. *Prerequisite: Acct. 211.*

Acct. 312 Managerial Finance 4 hours
(See Economics and Business 312.)
Prerequisites: Acct. 211 and 212.

Acct. 313 Intermediate Accounting I 4 hours

Begins a three-course sequence of accounting. This sequence of courses, together with Acct. 425, constitutes the "bedrock" for a solid foundation in accounting. Mastering these courses is essential for success in accounting. The intermediate accounting sequence provides an intensive and extensive study of accounting principles and procedures as they are applied to various situations and events. Acct. 313 provides a review of Acct. 211 and 212, studies the time value of money, accounting for liquid assets, and accounting for inventories. *Prerequisite Acct. 212.*

Acct. 314 Intermediate Accounting II 4 hours

Continuation of the intermediate accounting sequence. Studies accounting for liabilities and income taxes, operational assets, intangible assets, and corporation capital and earnings. *Prerequisite: Acct. 313.*

Acct. 330 Business Law 4 hours
(See Economics and Business 330.)

Acct. 352 Accounting for Not-for-Profit Organizations 4 hours

Study of accounting systems used to process the financial information of economic organizations not having profit as their primary goal. Studies budget preparation and uses and the integration of budgets into the accounting model of assets equalling equities and debits equalling credits. *Prerequisite: Acct. 212.*

Acct. 415 Intermediate Accounting III 4 hours

Conclusion of the intermediate accounting sequence. Studies accounting for long-term investments, bonds, pensions, leases, changes in principles, in estimates, and for errors, presentation of earnings per share, and preparation of the Statement of Changes in Financial Position. *Prerequisite: Acct. 314.*

Acct. 425 Cost Accumulation and Control 4 hours

Together with the intermediate accounting sequence, this course provides the "bedrock" for a solid foundation in accounting. Studies cost accumulation systems: job order and process, absorption and direct; cost controls: flexible budgets and standard costs; and cost, volume, profit relationships. *Prerequisites: Acct. 212 and either Acct. 314 or permission of the instructor.*

Acct. 441 Federal Income Taxation of Individuals 4 hours

Study of federal income tax law and implementing Treasury Department regulations and procedures governing federal taxation of individuals. Provides a general knowledge of federal individual income taxation rather than specific instructions in completing individual federal tax returns. *Prerequisite: Acct. 212 or permission of the instructor.*

Acct. 461 Financial Auditing 4 hours

Integrates several accounting courses. Introduces auditing principles and procedures as they are used to determine the fairness of an organization's financial statements. Studies generally accepted auditing standards, auditors' opinions, internal control, and ethical, legal, and professional responsibilities of auditors. *Prerequisites: Acct. 415 and 425.*

Acct. 477 Senior Seminar 2 hours

A capstone course integrating the student's background, experiences and previous curriculum in accounting. *May not be taken before senior year.*

Acct. 490 Senior Project 2 hours

Open only to students with a field of concentration in accounting. Preparation of the senior project and its presentation. *The topic for the senior project must be approved by the Head of the Economics and Business Department.*

Astronomy

(See General Science 201 Astronomy)

Biology

Aims

To acquaint students with the living world around them and with basic life processes; to demonstrate the scientific method as an approach to problem solving; to cultivate an appreciation of research; to develop laboratory skill in various types of work in biology; to prepare students as teachers of biology and for professional fields such as medicine, dentistry, veterinary medicine, and for graduate schools in various biologic disciplines; and to help students find and appreciate their role in the natural environment.

Requirements for Field of Concentration

A minimum of 40 semester hours in the department including the Senior Project. A minimum of 16 semester hours in chemistry, including two semesters of organic chemistry. Eight hours of physics are also required. German or French is recommended for those students preparing for graduate school. A semester of calculus is also strongly recommended. Statistics is recommended for students preparing for graduate work in ecology, wildlife biology, genetics and certain other fields.

Biology majors must complete Bio. 100, Bio. 180, Bio. 280, Bio. 290, and Bio. 308. In addition each major must choose 4 semester hours from each of the following three groups:
Bio. 343, Bio. 425, Bio. 467;
Bio. 228, Bio. 231, Bio. 326;
Bio. 440, Bio. 442



Requirements for Biology as a Second Teaching Field

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach biology in the secondary schools: Bio. 100, Bio. 180, Bio. 280, Bio. 167, or Bio. 308, Bio. 290, Bio. 326, or (Bio. 228 and Bio. 231), Chem. 101, Chem. 102, G.S. 480. See Education Department listings for required professional education courses. Biology majors seeking certification must complete the requirements listed above for biology as a field of concentration as well. A second teaching field is required. G.S. 480 is required for state teacher's certification in biology even if the student has taken Ed. 480 in humanities or social science.

Bio. 100 Modern Concepts in Life Science 4 hours

An introduction to modern concepts of cell biology, metabolism, photosynthesis, nutrition, reproduction, heredity, evolution, behavior, and ecology, emphasizing the process of acquiring biological knowledge. Consideration is given to social and ethical implications of biological issues.

Bio. 102 Horticultural Science 2 hours
Examination of the scientific concepts on which horticulture is based. Emphasis is placed on the study of the plant, the basis of all horticultural activities.

Bio. 105 First Aid as Related to the Principles of Biology 2 hours

Major emphasis is placed on the biological principles utilized in the standard first aid and personal safety course of the American Red Cross. Red Cross certificates may be earned by those passing the examination. Opportunity for instructors' certificates will be presented as an option at the end of the course. (May be taken for credit as Physical Education 226.)

Bio. 167 Introduction to Mammalian Anatomy and Physiology 4 hours
Mammalian anatomy as exemplified in the cat. Discussion and study of the functioning of the tissues and organ systems of the human body, lab study of the anatomy of the cat, the human physiology. *Not open to biology majors. Prerequisite: Bio. 100.* (May be taken for credit as Physical Education 167.)

Bio. 180 Invertebrate Zoology 4 hours
A structural, functional and evolutionary study of the major invertebrate phyla.

Bio. 205 Emergency Medical Training 4 hours
The medical, communication, transportation records, and report instructions required for certification by the West Virginia Department of Health as an emergency medical technician. *Red Cross advanced first aid certificates may be earned by those passing the examination.*

Bio. 210 Evolution 2 hours
Evidence for the theories of evolution with special attention to the modern synthesis of genetic and ecological factors. *Prerequisite: An elementary course in biology or permission of the instructor.*

Bio. 228 Field Botany 2 hours
Introduction to the taxonomy of vascular plants with emphasis on the local flora, including the techniques of herbarium science.

Bio. 231 Ornithology 2 hours
Anatomy, behavior, and identification of birds.

Bio. 280 Botany 4 hours
A study of plant life including the evolution of the various groups of plants, the morphology and anatomy of vascular plants, and the fundamental life processes of plants.

Bio. 290 General Genetics 4 hours
A synthesis of basic principles and modern molecular theory.

Bio. 308 Comparative Vertebrate Anatomy 4 hours
Comparative anatomy of the representative forms of vertebrates; lab study of the comparative anatomy of the shark, other lower vertebrates, and the cat.

Bio. 314 Introduction to Biochemistry 2 hours
(See Chemistry 314.)

Bio. 326 Ecology 4 hours
Study of the general principles of ecology of microorganisms, plants and animals. Special emphasis is placed on field study of several communities. *Prerequisites: Bio. 100 and Bio. 101 or permission of the instructor.*

Bio. 343 Microbiology 4 hours
Morphology and physiology of microorganisms; principles of lab technique; cultural characteristics and environment influences on microbial growth.

Bio. 425 Animal Physiology 4 hours
Structure and functions of the human body; the mechanism of bodily movements, responses, reactions, and various physiological states.

Bio. 440 Histology-Microtechniques 4 hours
Structure of the cell, its modification into various tissues, and the practice of general histological techniques.

Bio. 442 Embryology 4 hours
Study of the ontogenetic development of selected embryos. Major emphasis is on the vertebrates.

Bio. 467 Cell Physiology and Biochemistry 4 hours
Introduction to the structural organization of cells and the important aspects of cell physiology in the light of modern biochemistry and biophysics. *Prerequisites: Chem. 211-212 or permission of the instructor.*

Bio. 480 Methods and Materials in Teaching Physical and Life Sciences 4 hours
For course description see General Science 480. (May be taken for credit as Education 480.)

Bio. 487-488 Independent Study 2 or 4 hours each

Bio. 490 Senior Project 2-8 hours
Starts the first semester of the junior year and is to be completed in the spring semester of the senior year.

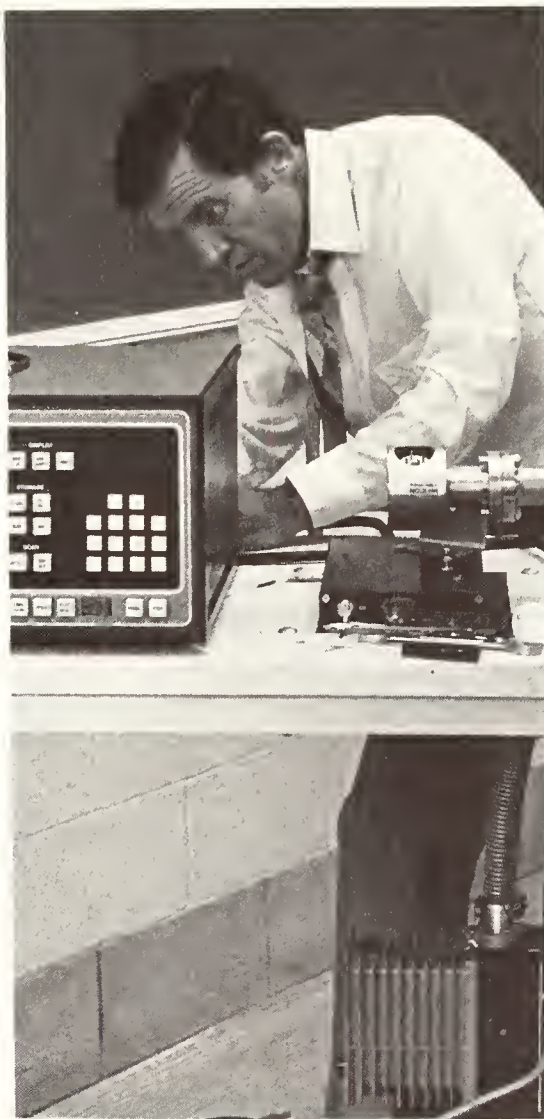
Chemistry

Aims

To contribute to the student's general knowledge and understanding of the nature of the physical world and his or her understanding of the place of chemistry in industrial and business life; to provide experience in the scientific method of reasoning; and to provide students concentrating in this field with a thorough and practical education in chemistry which may be useful in industrial, technical, and graduate work.

Requirements for Field of Concentration

A minimum of 36 hours in the department exclusive of the Senior Project. The distribution must include Chemistry 101, 102, 211, 212, 226, 324, 326, 404, 414, plus four hours of electives and at least two hours of Senior Project; Mathematics 201, 202; Physics 201, 202; and at least two hours from the group of Computer Science 140, 142, Physics 221, 261, 300, Mathematics 203, 341. Students who plan to do graduate work in chemistry will demonstrate a reading knowledge of chemical German, French, or Russian. Additional courses in mathematics are also strongly recommended. All course in chemistry as well as the indicated courses in mathematics and physics must be taken for a letter grade. For those students for whom it might be advantageous, a



program of study is offered consistent with the most recent standards laid down by the American Chemical Society.

The entering freshman who is interested in chemistry should select Chemistry 101 and mathematics at the appropriate level. Programs for subsequent semesters must be decided in conference with the faculty advisors for chemistry. Students planning to take the MCAT are strongly advised to take a course in the history of the fine arts during their fourth or fifth semesters.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach Chemistry in secondary school: Chem. 101, 102, 211, 212, 222, Physics 201, 202, G.S. 480,

and select six hours from the following: Chem. 224, 314, 323, 402, 414. See Education Department listings for required courses in Professional Education. A second teaching field is required.

Chem. 100 Consumer Chemistry 4 hours
(See General Science 100.)

Chem. 101 General Chemistry and Inorganic Qualitative Analysis 4 hours
Study of theoretical and descriptive inorganic chemistry. The lab work is primarily a study of the principles and practice of a systematic qualitative scheme of analysis for the cations and anions. *Three lectures and three hours of lab per week. Prerequisites: two units of mathematics or concurrently with Math 103.*

Chem. 102 General Chemistry 4 hours
Continuation of the lecture portion of Chem. 101. Study of solubility and acid-base phenomena in aqueous systems with appropriate lab work. *Prerequisite: Chem. 101.*

Chem. 211-212 Organic Chemistry 4 hours each
Introduction to the study of the organic compounds of carbon, both aliphatic and aromatic, involving a considerable amount of the electronic mechanisms of organic reactions. Lab work consists largely of organic preparations. *Prerequisites: Chem. 101, 102. Three lectures and three hours of lab per week.*

Chem. 226 Physical Chemistry I 4 hours
Introduction to the concepts and experimental techniques of classical thermodynamics with special emphasis on the concepts of enthalpy, entropy and free energy. A study of the different energy states of atoms and molecules. The statistical principles governing the distribution of particles within these states and the transitions between states.



Chem. 311 Bonding and Symmetry in Organic Chemistry 2 hours

Introduction to group theory and simple molecular orbital calculations as they apply to organic chemistry and to the spectra of organic compounds. Emphasis is placed on problem solving and structural determinations from spectroscopic data.

Prerequisite: Chem. 226 or permission of the instructor.

Chem. 314 Introduction to Biochemistry 4 hours

Study of the chemistry of some of the more important biological processes with emphasis on reaction mechanisms and methods of elucidation. *Prerequisite:* Chem. 212. (May be taken for credit as Biology 314.)

Chem. 324 Electrochemistry 4 hours
Study of oxidation-reduction and phenomena associated with solutions of electrolytes, application of these principles including classical electrochemical analysis, and the measurement of basic physical parameters. *Prerequisite:* Chem. 226.

Chem. 325 Chemical Instrumentation 2 hours

The theory and practice of selected methods in chemical instrumentation. Special emphasis will be placed on those methods not covered in other courses and on methods helpful for completion of Senior Projects. *Prerequisite:* Chem. 226.

Chem. 326 Physical Chemistry II 4 hours

Study of rate processes, especially in the liquid phase, and consideration of special problems associated with the liquid and solid states.

Chem. 402 Advanced Inorganic Chemistry 2 hours

Chemistry of certain elements and their compounds is studied and interpreted on the basis of modern theories of atomic and molecular structure. The necessary foundation in quantum mechanics is reviewed. *Prerequisites:* Chem. 222, 224.

Chem. 404 Advanced Inorganic Chemistry 4 hours

A systematic discussion of the important phenomena of modern inorganic chemistry to include bonding and structure, kinetics, thermodynamics, acid base theories and physical methods. Transition metal and organometallic chemistry are examined along with the chemistry of selected representative elements. *Three lectures and three hours of lab per week. Prerequisite:* Chem. 326.

Chem. 411 Physical Organic Chemistry 2 hours

Study of the theories and techniques relating structure and properties of organic compounds. *Prerequisites:* Chem. 212, Chem. 222 or permission of the instructor.

Chem. 414 Advanced Organic Chemistry 2 hours

Study of selected advanced topics in organic chemistry including reaction mechanisms. Lab is introduced, where appropriate, and stresses the use of instrumentation. *Prerequisites:* Chem. 212; Chem. 226 or permission of the instructor.

Chem. 430 Special Topics 2 hours each
Series of three courses devoted to the consideration of advanced topics and areas of special interest in the fields of Inorganic Chemistry (430-A), Organic Chemistry (430-B), and Physical Chemistry (430-C). *Prerequisite:* Permission of the instructor.

Chem. 477-478 Seminar in Chemistry 2 hours

Presentation of current research topics by students, faculty and visiting lecturers.

Chem. 480 Methods and Materials in Teaching Physical & Life Sciences 4 hours

For course description see General Science 480. (May be taken for credit as Education 480.)

Chem. 487-488 Independent Study 2 or 4 hours each

Chem. 490 Senior Project 2-6 hours

During the junior year the chemistry major is introduced to the methods of employing the chemical literature, selects a topic for advanced investigation, and makes a literature search of background material as a basis for an in-depth study in this area. There is one class meeting each week for both semesters. Following this preliminary work, an investigation of a significant topic in chemistry is made by each senior under the direction of a faculty member in the department. This work culminates in a written and oral report at the end of the senior year. *Fee:* \$20.



Communications

Aims

To prepare students for careers or graduate study in the fields of advertising, magazines, newspapers, public relations, radio and television by developing the skills necessary for professional-level performance; to help students analyze and understand all forms of written and oral communications directed toward a variety of audiences; to instill a sense of ethical and legal responsibility among future professional communicators.

The curriculum also supports preparation for entry into schools or business and management, law and public administration.

Requirements for Field of Concentration

Communications 101, 201, 206, 304, 403, 420; either 204 and 303, or 261, 271, 310; either 401 or 402; either 301 or 302.

In addition, students will complete a Senior Project, take 12 hours in English courses and/or foreign language literature courses, take Philosophy 124, and achieve a proficiency in reading a foreign language at the 200 level.

Normally students take 101 and 206 as freshmen. Appropriate courses outside of the department, including helpful

Core programs, can be recommended by advisors in the Communications Department.

It is recommended that students in the department complete one of the following tracks: Advertising, Broadcasting, Print Journalism, or Public Relations. Details of these tracks are available in the office of the Head of the Department.

Students seeking careers in Commercial Art, Television Graphics, or Communication Design may take advantage of the interdepartmental program developed between the Communications Department and the Fine and Applied Arts Department. See the respective department heads for requirements.

Students must have achieved at least sophomore standing for enrollment in any of the 300- and 400-level courses in the department.

Comm. 101 Introduction to Mass Communications 4 hours

History and theory of mass communications. Role of newspapers, magazines, radio, television, books, movies, and adjunct agencies in modern society. Effects on audiences.

Comm. 201 Beginning Reporting 4 hours

Study and practice of basic journalistic writing skills, including grammar and sentence construction as they relate to news writing. Basic reporting skills will be emphasized. A typing speed of 35 words per minute will be required to pass this course.

Comm. 204 Copy Editing and Layout 4 hours

Principles and practice in editing copy for publications; includes typography, layout, design of letterpress and offset newspapers, and use of computers. *Prerequisite: Comm. 201.*

Comm. 206 Interpersonal

Communication: Public Speaking 4 hours
Introduction to the dynamics of communication: levels of interaction between speaker and listener. Developing the use of voice and non-verbal signals; understanding oral style in language and logical argument in public speaking. Focus on the design and delivery of short speeches and on critical listening. (May be taken for credit as Fine and Applied Arts 203.)

Comm. 220-J Caribbean Journalism

2 hours

Study of the mass media and their impact economically, socially, politically, religiously, and educationally on the various Caribbean groups. The course deals with the media in the Virgin Islands, Puerto Rico, Cuba, Haiti, Dominican Republic, and the Caribbean Commonwealth nations. *January term only.*

Comm. 261 Radio Production 2 hours

Basic audio production and performance techniques for radio. Laboratory experience in the WVBC radio studios.

Comm. 271 Basic Television Production 2 hours

Basic video production and performance techniques, both in studio and on location. Topics include studio operations, camera operation, floor direction, remote production techniques and videotape recording technology. *Prerequisite: Comm. 261.*

Comm. 272 Intermediate Television Production 2 hours

Intermediate video production and performance techniques. Laboratory experiences in technical direction, program direction, video editing and script writing. Leadership skills developed through instruction on production personnel management and budgeting. *Prerequisite: Comm. 271*

Comm. 295 Publication Photography

4 hours

Introduction to the knowledge, skills, and techniques needed to produce quality black-and-white photographs for publication. Course covers both visual communication techniques and basic design and aesthetic concepts. Emphasis is on learning to meet specific news and other publications' photographic requirements effectively. *Two lectures and one four-hour lab per week. Prerequisites: Comm. 201 and junior standing.*

Comm. 301 Principles of Advertising

4 hours

Study of history, philosophies and principles of advertising. Media, markets and merchandising. Role and evaluation of advertising. Stress on copy writing and layout.

Comm. 302 Principles of Public Relations 4 hours

Study of public relations as a process involving research, planning, communication and evaluation. Analyzing publics and influencing their opinions. History, contributions, effects, laws and ethics of the field. Development of a public relations plan for an organization.

Comm. 303 Advanced Reporting 2 hours

Continuation of and building on the skills introduced in Beginning Reporting. Emphasis on reporting techniques, development and use of news sources and writing of various types of stories.

Prerequisite: Communications 201.

Comm. 304 Law of Mass Communications 4 hours

Study of the legal rights and limitations of the mass communications media in the United States.

Comm. 306 American Magazines 2 hours

Role and contributions of U.S. magazines, historically and currently. Trends in writing style, editing, production, layout, advertising, promotion, reader research, and circulation. Practice in writing three articles for a professional journal and general circulation magazines.

Comm. 310 Advanced Broadcast News Reporting 2 hours

A lecture-laboratory course dealing with the complexities of the electronic news gathering process. Emphasis on the use of state-of-the-art technology and its affects on news content and story organization. Field trips to local stations and guest speakers from the media. Students will be required to gather and report news using the technology associated with radio, television and cable.

Prerequisites: Comm. 201, 271.

Comm. 311 Broadcast Management

4 hours

Managing the radio/television station including administration, sales, promotion and programming, with applications to network, cable and public broadcasting.

Comm. 320 Public Relations Writing

2 hours

Practice in the styles of writing used in public relations, including publicity, publications copy, scripting for audio and audio/video productions and public relations advertising.

Prerequisite: Comm. 302.

Comm. 325 Public Relations Case**Problems** 2 hours

Application of the principles of public relations to actual and hypothetical cases. Consideration of practical, ethical and legal implications of decisions made while managing public relations operations. *Prerequisite: Comm. 302.*

Comm. 340-345 Special Topics in Mass Communications 2 or 4 hours**Comm. 350 Persuasion** 4 hours

Concentrated study of persuasion theory. Topics include; learning theory, consistency theories, social judgment theory, motivation, the enthymeme, counterattitudinal advocacy, role-playing and inducing resistance to persuasion. *Prerequisite: Comm. 206.*

Comm. 355 Advanced Public Speaking

4 hours

Focuses on specific types of speeches and rhetorical situations. Special emphasis is given to speechwriting and to the actual delivery settings for these speeches. Speeches include: introduction, nomination and acceptance, eulogy, after-dinner, impromptu, question response, sales presentation, reports, etc. *Prerequisite: Comm. 206.*

Comm. 361 Advanced Radio Production

2 hours

Advanced production and performance techniques for the radio broadcaster.

Laboratory experiences in the WVBC radio studios. *Prerequisite: Comm. 261.*

Comm. 371 Advanced Television**Production** 2 hours

Integration of the technical and creative skills necessary for broadcast television production, both in studio and on location. Definition of creativity and its role in broadcast television.

Prerequisite: Comm. 272.

Comm. 383 Advertising Creativity 4 hours

Principles and practices of writing copy for the print and electronic media. *Prerequisite: Comm. 301.*

Comm. 384 Advertising Media Buying

2 hours

Study of the process of developing an advertising media plan. Extensive analysis and use of audience and marketing data for the print and broadcast media. *Prerequisite: Comm. 301.*

Comm. 385 Advertising Media Selling

2 hours

Theory and techniques of selling print and broadcast media to advertisers. Salesmanship, including presentation techniques.

Prerequisite: Comm. 301.

Comm. 401 History of American Mass Communications 4 hours

History of newspapers, magazines, books, radio and television as well as the related areas of public relations and advertising in the United States.

Comm. 402 Public Opinion 4 hours

The nature and significance of public opinion. Includes studies of public opinion formation and measurement, the roles of news media, advertising, censorship, propaganda, political indoctrination, and other factors.

Comm. 403 International**Communications** 2 hours

Comparative media systems: theory and practices in print and electronic media, advertising, public relations and journalism education in Europe, Asia, Latin America, the Middle East and Africa.

Comm. 404 Direct Response Advertising

2 hours

Study of theory and techniques of direct response advertising and promotion. Preparation of an original project and/or service of a profit or non-profit institution.

Prerequisite: Comm. 301.

Comm. 405 Public Relations Campaigns

2 hours

The handling of an organization's public relations program or an organization's special public relations campaign, including researching and analyzing the public relations situation, planning the program or campaign, and developing the various communications tools to be utilized. A competitive public relations agency model is used. *Prerequisite: Comm. 320 or 325.*

Comm. 406 Advertising Campaign

4 hours

Development of an advertising campaign including situation analysis, strategic advertising plan and some execution of specific creative and media tactics. A competitive agency model is used. *Prerequisite: Comm. 301, 383, or 384.*

Comm. 420 Professional Internship

2 hours

Professionally supervised experience with an off-campus media organization or a communications agency. Assignments will allow for application of classroom materials and campus media experiences and will be similar to those experienced by new communications professionals. *Minimum of 160 hours required. Generally taken as a senior. Prerequisites: Two on-campus media experiences and a professional observation. (Details about prerequisites available from the Department of Communications.)*

Comm. 487-488 Independent Study 2 or

4 hours each

Comm. 490 Senior Project 2-8 hours

Communication Design

(See Fine and Applied Arts 302, 303, 304, 404, 405, and 406.)

Computer Science

Aims

To help students 1) recognize problems that can be solved with the aid of a computer; 2) write structured programs in a reasonable amount of time that work correctly, are well documented, and readable; 3) determine whether or not they have written an efficient and well organized program; 4) assess the implications of work performed either as an individual or as a member of a team; 5) understand basic computer architectures; 6) understand how the process of modern operating systems cooperate and compete with each other as they perform their functions. To prepare students to 7) pursue in-depth training in one or more application areas of computer science; 8) further their education in computer science; 9) gain employment in some computer related capacity.

Requirements for Field of Concentration

I. Computer Science 201, 202, 280, 290, 330, 370, 380, 478, and 490

II. Mathematics 201, 202, 281, and 354.

CS 100 Computers and Society 2 hours

The impact of computers and computer systems on society is studied. Current topics such as the following are covered: the impact of computers on employment; automation and the labor force; overview of computer applications in government, medicine, education, etc.; social issues – ethics, information banks, privacy and the Freedom of Information Act, computer abuses; the future – a cashless society and computers in the home. (May be taken for credit as Sociology 105.)

CS 140-150 Introduction to Programming 2 hours each

The following courses provide an introduction to computers by programming in a high level language on the Prime computer. The emphasis is programming real-life problems using efficient coding techniques. These courses are directed towards the student who wants to use the computer as a problem-solving tool.

CS 140 Introduction to Programming Using BASIC 2 hours

This course is directed toward the non-science student. Not recommended for students who have successfully completed any other computer language course.

CS 142 Introduction to Programming Using FORTRAN 2 hours

The programming assignments in this course will involve applications to science problems.

CS 143 Introduction to Programming Using PL 1 4 hours

Programming assignments in this course will involve applications to science problems.

CS 144 Introduction to Programming Using COBOL 4 hours

Programming assignments in this course will involve applications to business problems.

CS 145 Introduction to Programming Using RPG II 2 hours

Programming assignments in this course will involve applications to business problems.

CS 150 Programming for Science Applications 4 hours

This course will teach methods of structured programming and will use both FORTRAN 77 and PASCAL as computer languages. All programming will involve scientific applications. *Prerequisite: Permission of instructor.*

CS 200 Computer Applications in the Social Sciences 2 hours

A study of computer techniques applied to social and behavioral sciences. Topics include language selections, matrix manipulation, statistics (basic), analysis of variance, correlations and regression, econometrics, and profit analysis packages.

CS 201 Computer Science I 4 hours

This beginning course for computer science majors may also be taken by others who wish to learn the language. The emphasis is on techniques of algorithm development, structured programming and debugging techniques as they apply to the PASCAL language.

CS 202 Computer Science II 4 hours

An introduction to operating systems, data structures and computer organization and files. The data base management system INFO by Henco will also be discussed. The programming assignments will provide the students with advanced features of PASCAL and an introduction to PL1, another structured language. *Prerequisite: CS 150 or CS 201.*

CS 222 Digital Electronics 4 hours
(See Physics 222.)

CS 280 Assembly Language 4 hours

A study of assembly language programming methods. Topics include computer organization, assembly process, assembly coding, addressing, binary arithmetic, storage allocation, character and bit manipulation, and debugging techniques. *Prerequisite: CS 202.*

CS 290 Data Structures 4 hours

Basic data concepts and their representation. Linear lists, strings and string processing, algorithms, and arrays. Storage allocation and representation of arrays. Storage systems and structure, and storage allocation and collection. *Prerequisite: CS 202.*

CS 310 Discrete Structures 4 hours

Fundamental algebraic, logical, and combinational concepts of computer science. Topics include graph theory, monoeds and finite automata, lattices and Boolean algebras.

CS 330 Computer Organization 4 hours

Application of Boolean algebra to combinational circuit design problems. Organization of simplified computer components. Adders, arithmetic and logical units, memory organization. Architecture and physical realization of computer systems. *Prerequisite: CS 202.*

CS 370 Operating Systems 4 hours

Batch processing systems. Implementation techniques for parallel processing of input/output and interrupt handling. Memory management, system accounting, interprocess communication and interfaces, and deadlocks. *Prerequisite: CS 280.*

CS 380 Introduction to Data Base Design 4 hours

This course presents an in-depth study of the design and the implementation of a data base. Topics include architecture of a data base, the three approaches (relational, network, and hierarchical) to a data base. Also included is some experience with INFO, a relational data base package by Henco. *Prerequisite: CS 290.*

CS 390 Numerical Analysis

4 hours
(See Mathematics 390.)

CS 400 Interactive Computer Graphics

4 hours
A study of graphics on the microcomputer using Turtle Graphics and the UCSD PASCAL. *Prerequisite: One high level language other than BASIC.*

CS 410 Computer Simulation 2 hours

Simulation methodology including generation of random numbers and variates, analysis of data generated by simulation experiments, and validation of simulation models. Introduction to queuing theory. Selected simulation applications. *Prerequisites:*

Math 383.

CS 450 Data Base Concepts 2 hours

Introduction to the concept of a data base. Topics include data organization and structure data security. Also discussed will be a comparison of data base approaches and access methods. Some programming assignments will be given in INFO, the data base management system on our PRIME. *Prerequisite: CS 202.*

CS 460 Programming Language Structures 4 hours

This is a course in programming language constructs emphasizing the run-time behavior of programs. Topics include: formal grammars, parsing, information binding, data storage, global and local variables and parameters, string handling and list processing. *Prerequisite: CS 202.*

CS 478 Senior Seminar 2 hours

Current topics in computer science.

CS 482 Computers in Education 2 hours

Students will become familiar with the microcomputers and some software available for classroom use. Methods for evaluating software will be discussed. Students will design classroom applications using LOGO or some other software package. *Prerequisite: Permission of Instructor.*

CS 487/8 Independent Study 2 or 4 hours

CS 490 Senior Project 2-8 hours hours

Economics & Business

Aims

To help students develop a broad foundation of knowledge in business and the liberal arts in order that they may act intelligently and effectively in the business environment. Specific emphasis will be placed on cultivating the ability to apply knowledge and develop proficiencies in the use of analytical tools for problem-solving in business, government and society. The courses offered serve as preparation for work in business, government, law, public service and graduate study. Students in the department have access to a technologically equipped lounge/seminar room in Old Main for the study of economics and public policy furnished by a gift from Mrs. Kathryn Stanley Dohr in memory of her late husband, James Dohr.

Requirements for Field of Concentration

A minimum of 26 hours of courses in the department exclusive of the Senior Project. Required courses are: Econ. 200, 280, 290, 301, 302, 312, and 477. Related required courses are: Accounting 211 and 212, Mathematics 201, 281, and 282, and four credit hours from Computer Science 142, 143, 144, 145, and 200.

Students considering economics as a field of concentration should complete by the end of the sophomore year: Econ. 200, Acct. 211 and 212, Math. 201 and 281. Students with a concentration in Economics and Business are limited to 12 hours in Accounting beyond the required courses (Acct. 211, 212).



Students concentrating in Economics and Business are expected to attain a minimum grade of "C" in all courses in the department. If a student receives a grade lower than a "C," the student must arrange an interview with the head of the department prior to taking additional upper-level courses.

Econ. 101 Personal Finance 4 hours
To develop an understanding of the concepts needed for intelligent consumer decision-making. Budget policies, borrowing, installment buying, marketing techniques, and consumer purchases in the areas of food, clothing, automobiles, housing, social insurance, personal insurance, pension programs, investment markets, and estate building. (*Not recommended for students with a field of concentration in Economics and Business.*)

Econ. 111 Introduction to Business 2 hours
Structure, procedures, and objectives of the business system; economic and social environments of business; role of business in our culture.

Econ. 200 Principles of Economics 4 hours
Fundamental concepts, principles and problems of modern economics. Alternative methods of settling economic questions, with special emphasis placed on the functioning of the market system. Pricing, output determination, monopoly power, wage controls, and price fixing in relation to contemporary issues. The student is also introduced to problems of money and banking, growth, the labor movement, and business operations. Students will read broadly from non-technical literature as well as conventional text materials.

Econ. 280 Management 4 hours
Study of the management process; planning, organizing, staffing, controlling, decision-making and group dynamics. Introduction to organizational behavior theory. *Prerequisite: Econ. 200.*

Econ. 284 Operations Management 4 hours
Study of operations that use human, material and energy resources to create products and services. A system approach will emphasize that all parts of the conversion process are interrelated and that the principles can be applied to many kinds of organizations. Analytical, mathematical and decision-making skills will be developed. *Prerequisites: Econ. 200, Math 201, 281.*

Econ. 286 Personnel Management 4 hours
An examination of personnel management as a dynamic network of processes, systems, and conditions that affect all organizations and the people in them. In particular, the course treats extensive application of theory, research, and practice to job design, staffing, training and development, appraisal compensations, leadership, organizational justice, and collective bargaining. *Prerequisite: Econ. 200*

Econ. 287 Organizations and Human Behavior 4 hours
This course seeks to improve effectiveness of organizations by strengthening human processes. It explores specific aspects of organizational culture such as motivation, conflict, power, and leadership; exercises and simulations are emphasized. (May be taken for credit as Psychology 287.)

Econ. 290 Principles of Marketing 4 hours
Marketing function of the manufacturer, wholesaler, jobber, retailer, mail order-house, chain store and other marketing institutions; cost of distribution; problems of marketing management and planning; and modern trends in marketing. *Prerequisite: Econ. 200.*

Econ. 300 Business and Society 4 hours
Interface of business with government and society; management action in situations involving significant political and social factors; the changing role of business. *Open only to juniors and seniors.*

Econ. 301 Price Theory 4 hours
Advanced study of resource allocation, price determination, output determination, and income distribution at the level of the individual firm under various market conditions. Mathematical analysis and model building will be used, whenever appropriate. *Prerequisites: Econ. 200, Math 201, 281.*

Econ. 302 Public Economic Policy 4 hours
Advanced study of the determinants and behavior of the national economy which will include consideration of production, employment, and price levels. Mathematical analysis and model building will be used whenever appropriate. *Prerequisite: Econ. 200.*

Econ. 312 Managerial Finance 4 hours
Corporate organizations and the planning of financial requirements. Intensive study of cash flow, budgeting, capital decisions, internal financing, and corporate reorganization. *Prerequisites: Acct. 212, Econ. 200, Math 281.* (May be taken for credit as Accounting 312.)

Econ. 316 Money, Banking, and Fiscal Policy 4 hours
Various money markets; the operation of commercial banks, Federal Reserve System, and the Treasury Department including an analysis of tax revenues, expenditures, and debt-financing. *Prerequisite: Acct. 212.*

Econ. 325 Investment Management 4 hours
Critical study of the various types of investment instruments and the relative merits of each, investing procedures, security analysis, security ratings, portfolio theories, and portfolio analysis. *Prerequisites: Acct. 212, Econ. 200, Math 281.*



Econ. 330 Business Law 4 hours
Introduction to the nature and development of law, the legal aspects of contracts and other business instruments as set forth in the Uniform Commercial Code, and some aspects of partnerships and corporations. (May be taken for credit as Accounting 330.)

Econ. 341 Labor Problems 4 hours
General course in labor economics, with an emphasis on trade unionism; history and objectives of organized labor; employment and wage theory; managerial labor policies; collective bargaining; current social, economic and political aspects of labor management relations; and labor law. *Prerequisite: Econ. 200.*

Econ. 360 International Trade and Transnational Marketing 4 hours
Principles of international trade and finance and their application to the modern world; emphasis on transnational marketing strategies, problems and issues; theory of comparative advantage; exchange rates, monetary standards, tariffs, quotas, and commercial policy; capital movements; aid to less developed countries; geographic origin and direction of trade routes and products. *Prerequisite: Econ. 200.*

Econ. 399 Problems in Business Administration 2 or 4 hours
Selected management problems related to the total enterprise and emerging technology; managerial and corporate strategy, utilization of resources, functional disciplines of management. *Prerequisites: Econ. 200, 280.*

Econ. 477 Senior Seminar 2 hours
A capstone course integrating the student's background, experiences and previous business and economics curriculum through case studies and simulation exercises.

Econ. 487-488 Independent Study 2 or 4 hours each

Econ. 490 Senior Project 2-8 hours
Open only to students with a field of concentration in the department. Preparation of the senior project and its presentation. Time will also be devoted to review for the senior comprehensives. The topic for the senior project must be selected before the end of the junior year and be approved by the head of the department.

Education

Aims

To develop a teacher who is a self-directed decision maker who recognizes the need for personal and professional growth, has the skills necessary to pursue it, and is secure enough to engage in personal and professional self-evaluation.

To develop a teacher who can recognize the needs of young people and utilize the liberal arts background, content preparation, and the principles of education in attempting to meet those needs and facilitates the acquisition of knowledge for that purpose; a teacher who can provide an educational environment to enhance the development (social, emotional, cognitive and physical) of individuals so that they may make sense of their world and make decisions effectively within that world.

To develop a teacher who can interact effectively within the community and school environment and has the skill and willingness to communicate with people of all ages and backgrounds.

To develop a teacher who also analyzes emerging trends and thinks critically about them in an attempt to arrive at a human balance between the needs of the child, the needs of society, and personal needs in order to perform effectively and ethically.

In summary, to develop a teacher who is a perceptive and aware person who can utilize intellectual skills and knowledge to think critically and pursue self-directed goals.

Requirements for Teacher Certification

A student preparing for certification must plan to complete: (1) the requirements for graduation as described on Page 20, (2) the testing program required by the West Virginia



Board of Education in the areas of reading, mathematics, writing, speaking and listening, (3) a selection of courses providing appropriate background for teaching in a particular field, (4) a sequence of professional education courses and experiences designed to give broad understanding of concepts and skills in teaching.

Bethany is accredited by the National Council for the Accreditation of Teacher Education (NCATE) and is a party to the interstate compact for reciprocity in certification through the West Virginia Board of Education approval of all certification programs offered at Bethany College.

To become eligible for teacher certification, the student must complete a college and state-approved program. It is the student's responsibility to seek appropriate counseling from the Education Department, preferably early in the freshman year, and to become familiar with all of the requirements. *A Guide to Teacher Education*, available in the Education Department Office, gives a full description of all programs.

The department recognizes abilities which students may already have in a given subject matter area and assists them in planning their program accordingly. Waivers or advanced standing granted by the College can be noted on official transcripts so that

courses from which a student is exempted may be applied toward certification.

Leadership of children and youth groups, e.g., summer camps, scouts, church school, playground supervision, etc., is strongly recommended.

A period of observation and participation in a school is an important and integral part of the education curriculum. Education students are encouraged to consider observation and participation in an educational agency when planning their intercultural and/or citizenship practicum.

Professional Education

Students preparing to teach at any level must complete the sequence of required professional courses. Required courses cannot be taken credit-no credit.

First Semester	Credit	Second Semester	Credit
Freshman			
Psych. 100 General Psychology	4		
Sophomore			
*Ed. 201 Human Development I	4	Ed. 202 Human Development II	4
		Ed. 242 Principles and Curriculum in the Public Schools	2
(Students must apply for admission to Teacher Education during Ed. 242)			
Junior			
Appropriate methods course(s)	2-4	Ed. 348 Professional Practicum	4
		Appropriate methods course(s)	2-4
(Students must apply for the Professional Year during Ed. 348)			
Senior Professional Block			
Sp. Ed./Psych. 410 Tests and Measurements	2	Ed. 340 Reading in the Content Areas	2
Ed./Sp. Ed. 470 Observation and Directed Teaching	8		
Ed. 410 History and Philosophy of Education	4		
Appropriate methods seminar(s)	4		

No Other Courses Permitted

Elementary Education (K-8)

A student seeking certification to teach in the elementary school must follow the course of study for MULTI-SUBJECTS K-4 and 5-8. This allows the student to teach in the self-contained classroom. In addition to the Professional Education requirements listed, the student must take related, required courses. A complete listing of these courses is available from the Education Department and is contained in the *Guide to Teacher Education* (available from the department).

Students preparing to teach should discuss their program with the Head of the Education Department. Students are encouraged to pay special attention to Perspectives course choices. A Middle Childhood Specialization may be added to the elementary certificate if all requirements for both levels are met. Specific Learning Disabilities certification is also available to the student who wishes to teach in special education (see below).

The *Guide to Teacher Education*, available in the Education Department office, has specific information about required and related course work.

Specific Learning Disabilities (K-8)

Certification for teaching the child with specific learning disabilities is available as a specialization for the elementary certificate. Students who are interested in this area of special education must take the required special education courses in addition to the multi-subjects and professional education courses. Further information is available from the Education Department and is contained in the *Guide to Teacher Education*.



Middle Childhood Education (5-8)

Students preparing to teach in middle childhood settings (Middle School and Junior High Schools) will follow the Professional Education Sequence listed. They must choose two teaching fields from: Mathematics, Language Arts, Social Studies, General Science, French, German, Spanish, and Physical Education.

Students preparing to teach at the middle childhood level should discuss their program with the Head of the Education Department. Two teaching fields are required for a degree in education and certification in West Virginia. Middle Childhood certification may be added to elementary or secondary certification with the advisement and permission of the Education Department. A *Guide to Teacher Education* gives a full description of all programs leading to certification in West Virginia. The *Guide* is available in the Education Department.

Each student is responsible for planning a program for meeting certification requirements.



Secondary Education (9-12)

Students preparing to teach in secondary schools are expected to follow the sequence of required education courses listed in the Professional Education sequence. General distribution and other requirements for graduation, and the student's field of concentration, must be added. The required education courses cannot be taken Credit-No Credit.

Students preparing to teach at the secondary level should discuss their program with the Head of the Education Department, as well as the person

responsible for the Teacher Education Program in the major field. Students interested in French, German, Spanish, Mathematics, English, Social Studies, General Science and Physical Education must complete the Middle Childhood (5-8) program in their field. Physical Education candidates may plan for K-12 certification. A *Guide to Teacher Education* gives the full description of all programs leading to certification in West Virginia. The *Guide* is available in the Education Department.

Teaching fields include: Biology, Chemistry, Physics, General Science, French, German, Spanish, English, Physical Education, Social Studies.

Education (Non-School Settings)

The Education Department provides for a field of concentration, without public school certification, to allow students to prepare for a variety of roles in non-school settings, such as: 1) training program development and implementation in business and industry, 2) policy planning roles in state and federal agencies, and 3) higher education instruction in foundation areas.

Courses required are: Sp. Ed. 410; Education 201, 202, 242, 302, 348, 401, 475, 476, and 490.

In addition, each student will propose a program of study in one of the following areas of specialization: Human Resources Management and Training, Education Policy Planning, Educational Foundations, or other identified pre-professional areas of study within the discipline. Courses will be determined through the development of a program proposal based upon the student's career and study goals.

Bilingual-Bicultural Teacher Education

Bethany College, through the combined efforts of the Education Department and the Foreign Language Department, offers preparation for those students who might wish to teach young people whose first language is Spanish. While West Virginia does not offer certification in this area, many states do and a student completing the Bilingual-Bicultural sequence of courses would meet the requirements of most states. Students interested in this program should contact the Head of the Education Department and the Head of the Foreign Language Department for details regarding the program.

Psychology/Education Interdisciplinary Program

The Education Department and the Psychology Department offer an Interdisciplinary Degree for students interested in preparing for school and child related careers. Information concerning this program can be obtained from the Education Department of the Psychology Department.

Admission to Teacher Education

During Education 242 (Principles and Curriculum in the Public Schools), written application for admission to teacher education should be submitted to the Education Department on forms obtained from the department office.

The following criteria must be met to be admitted to the program:

1. Quantitative Skills Test (given to entering freshmen and may be retaken): 90 percent.
2. Nelson-Denny Reading Test (given to entering freshmen and may be retaken): 12.0 grade equivalent.
3. Grade Point Average: 2.0 overall, in education, and in proposed field of study.
4. Two positive recommendations from faculty and/or staff of Bethany College.
5. Positive recommendation by Education Department.

The student may be granted full admission, provisional admission, or may be denied admission. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Retention

A student must maintain the required level of performance and must show continued professional behavior. A student's qualifications may be reviewed at the end of any semester if such a review is deemed necessary.

Admission to the Professional Year

During Education 348 (Professional Practicum), each student must apply for admission to the professional year which includes student teaching. The following criteria must be met:

1. Successful scores on the Preprofessional Skills Test (reading, mathematics, writing).
2. Successful completion of the speaking activities on ACT-Comp.
3. Successful completion of the Listening Test.
4. Grade Point Average: 2.25 overall, in education and in the field(s) of study.
5. Positive recommendations from the department in which the student is seeking certification.
6. Positive recommendation from the Education Department.
7. All appropriate prerequisite courses must have been successfully completed.

The student may be granted full admission, provisional admission, or may be denied admission. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Application for Certification

Following completion of student teaching and near the completion of the program, each student should initiate application procedures for certification. The following criteria must be met for certification in West Virginia:

1. Grade Point Average: 2.25 overall, in education, and in the area(s) of certification.
2. Successful completion of the West Virginia Board of Education Subject Area competency examination.
3. Successful completion of the Comprehensive Examination in area of concentration and in Education (Secondary Certification candidates should see the Head of the Education Department).
4. Successful completion of student teaching and all required course work.
5. Recommendations from the Education Department and from the student's area of certification.
6. All requirements for the initial degree must be met.

Note: Graduation from Bethany College does not guarantee certification in the state of West Virginia. The student must meet all the criteria for certification as determined by the College and by the West Virginia Board of Education.

All required testing can be arranged through the Education Department at the appropriate times in the student's career at Bethany College.

The student may be recommended for full certification at the initial level, or may be eligible for a temporary permit. A student who fails to meet criteria may be denied recommendation. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Competency-Based Professional Block — Student teaching is conducted for the entire first semester of the senior year in area schools or off-campus centers. Related course work is integrated with student teaching to provide direct application to field experience. Students assigned to off-campus centers may need to live in the community where the center is located. The College will assist in locating housing if desired, and with other details of the arrangement.

Students are not permitted to schedule courses in conflict with the block during the semester they are enrolled in it, or carry extra-curricular activities which interfere with the requirements imposed by the block. Arrangements can usually be made for practice and participation in varsity sports. Any exceptions to the above must be approved by the head of the department concerned and by the Dean of the Faculty. Students should *not* register for other than the prescribed Professional Block courses without written permission from the Education Department.

Education 100 Developmental Studies: Reading 2 hours

Designed to provide basic instruction in readings and comprehensive skills for first semester freshmen. Emphasis will be placed upon the students growth in the specific areas of word recognition, vocabulary, comprehension and study skills. (*Offered only as credit/non credit*)

Education 105 Developmental Studies: Mathematics 2 hours

Designed to provide developmental mathematics instruction for the college student who wishes to improve his/her abilities in mathematics. Emphasis will be placed upon conceptual understanding of basic mathematics with corresponding computational skill development. (*Offered only as credit/noncredit. Does not fulfill Quantitative Reasoning perspective requirement*)

Ed. 201 Human Development I 4 hours
Individual and group development from infancy to adolescence. Observation and first-hand contacts with children are included. Educational programs are considered in terms of the total child development. *Freshmen not admitted.* (May be taken for credit as Social Work 201.)

Ed. 202 Human Development II 4 hours
Individual and group development from adolescence through senescence. Applications are made in relation to learning theory, self-understanding, and preparation for working with young people. *Freshmen not admitted.* (May be taken for credit as Social Work 202.)

Ed. 242 Principles and Curriculum of the Public School 2 hours
Introductory course in which students explore the goals of education and their implementation; the role of the teacher and professional concerns while applying the concepts of human development.

Ed. 275 Student Development in Higher Education
Study of the philosophy of higher education and the development of the individual student within the college environment. Emphasis is placed upon personal growth, communication skills, group dynamics, and residence hall programming. Didactic and experiential learning in the areas of personal, academic, and vocational counseling is included. *Enrollment limited to Resident Advisors.* (May be taken for credit as Psychology 275.)

Ed. 289 Children's Literature 2 hours
Includes background of the history of literature for children; familiarity with established and current literature in this area; critical analysis skills; methods and techniques of using literature; work with children. (May be taken for credit as English 289.)

Ed. 290 Literature and Adolescence 2 hours
(See English 290.)

Ed. 300-309 Issues in Education
Courses focusing on special topics in Education for majors and non-majors.

Ed. 300 Juveniles, Law and School 4 hours
A review of the social and legal status of juveniles to 1899, through the Warren Court and today. Law libraries, Supreme Court decisions, juvenile authorities, detention centers, school and college authorities will provide applications for the basic concept of justice as it applies to juveniles in this country.

Ed. 301 Educational Ethnography: Field Based Research in the Schools 4 hours
This course will investigate the process of constructing, through direct observation, a theory of the working of a particular culture (i.e., schools). Students will study the theoretical base, rationale and methodology used in collecting and analyzing data by means of an ethnographic approach.

Ed. 302 School and Society 4 hours
A study of the role of schools in a society, of the school as a formal and informal organization, and of the function of schooling. The course will utilize the methodologies of the disciplines of education, sociology, and other social sciences. Case studies and on-site observations combine with a variety of readings to provide a wide range of viewpoints for students to evaluate. (May be taken for credit as Sociology 302.)

Ed. 311 Instructional Theory and Applications 2 hours
Studying and practicing the use of a wide variety of teaching strategies appropriate for adult learners; preparation for implementation in a variety of settings and with a variety of subjects.

Ed. 312 Curriculum Development 2 hours
Study of the methods of curriculum development and implementation. Practice with the appropriate subject matter. Practice in evaluating curricular materials in a variety of media. Study of curriculum evaluation.

Ed. 328 Human Sexuality 2 hours
(See Psychology 328.)

Ed. 340 Teaching Reading in the Content Areas 2 hours
This course will focus on diagnostic and prescriptive teaching techniques. Both the corrective techniques for the remedial reader and the higher order cognitive skills will be included. In addition to classwork this course includes two hours weekly of tutoring of middle school, secondary, or college students who have been recommended by their advisors for help in reading. *Prerequisite: Ed. 348.*

Ed. 344 Teaching Skills Laboratory Non-credit
Study and practice of specific teaching skills related to the technical and media areas of education. Students must complete the required work prior to student teaching. Information related to the course work is available from the Education Department office. Elementary and secondary.

Ed. 345 Methods and Content in Elementary and Middle Childhood I: Mathematics 4 hours
Practical application of arithmetical skills, including the understanding of fundamental processes; comparison of different philosophies in teaching arithmetic; the elements of modern math; and the theoretical and practical application of the metric system at all levels of the curriculum. Classroom experience in public schools. *Prerequisites: Math 250 or permission of the instructor, Ed. 242.*

Ed. 346 Methods and Content in Elementary and Middle Childhood II: Language Arts 4 hours

Emphasis on teaching the skills of reading, listening, speaking, and writing as they relate to the total curriculum. Emphasis on teaching of reading and the integration of the related areas in language arts. Students are expected to demonstrate competence in appropriate audio-visual aids. Classroom experience in public schools. *Prerequisite: Ed. 242.*

Ed. 348 Professional Practicum 4 hours
Preparation of the prospective teacher for a professional role as observer and participant in the classroom. *Prerequisite: Ed. 242.*

Ed. 350 Reading: Diagnosis and Prescription 2 hours

This is a methods course which deals with reading disabilities within the content areas. Format will include diagnosis of specific problems and their origins as well as prescription for correction and remediation. Those enrolled in the course will participate in laboratory situations to tutor disabled readers. *(To be taken following or concurrent with Ed. 340 or Ed. 346.)*

Ed. 355 Mathematics: Diagnosis and Prescription 2 hours

This is a methods course which deals with corrective and remedial situations in mathematics. Format will include diagnosis of specific problems and their origins as well as prescription for correction and remediation. Those enrolled in the course will participate in laboratory situations to tutor students with problems in mathematics. *(To be taken following or concurrent with Ed. 345.)*

Ed. 401 History and Philosophy of Education 2 hours

Development of modern education in social, historical, and philosophical perspective, emphasizing backgrounds of present practices, current problems, and issues. Current practice is analyzed in terms of philosophic rationale and applications are made to the school situation.

Ed. 428 Principles and Techniques of Secondary Education 4 hours

Aims, functions, and curriculum organization of middle, junior high, and senior high schools. Basic strategies, materials, and techniques, including evaluation applicable to teaching, are integrated with a full semester of student teaching in schools. Certification and employment procedures, professional practices, and continuing education are also considered. *Prerequisite: Ed. 348.*

Ed. 447 Methods and Content in Elementary and Middle Childhood III: Science 2 hours

Understanding of the concepts of the sciences approached through various methods, including unit study, inquiry, experimentation, and the process approach. Practical application in school situation. *Prerequisite: Ed. 348.*

Ed. 448 Methods and Content in Elementary and Middle Childhood IV: Social Studies 2 hours

Understanding of the concepts of social studies approached through various methods, including unit study, inquiry, experimentation, and the process approach. Practical application in school situation. *Prerequisite: Ed. 348.*

Ed. 470 Observation and Directed Teaching 4 or 8 hours

Directed full-semester or half-semester observation and student teaching in schools with partial assignments in appropriate grade levels; to include weekly student teaching seminars and a minimum of 150 clock hours actual teaching. Students must make applications for student teaching prior to advance registration. Other course or activities which might interfere with student teaching are not permitted. *Concurrent with enrollment in the Education Year. (CR/NCR course.)*

Education 475 Professional Internship 4 hours

Participation in an adult training and/or educational program appropriate to the student's area of study and potential employment. Students will apply the skills and knowledge gained in previous courses.

Education 476 Education in Non-School Settings 2 hours

A seminar in education for the potential teacher of adults. Focus on the process of training in settings other than in traditional school settings. *To be taken concurrently with Education 475 Professional Internship.*

Ed. 480 Methods and Materials in Teaching 2 or 4 hours

See courses numbered 480 offered by Biology, Chemistry, English, Fine and Applied Arts, Foreign Languages, General Sciences, Mathematics, Physical Education, Physics, Psychology and Social Sciences.

Ed. 482 Methods and Materials in Bilingual-Bicultural Education 2 hours
(See Foreign Language 482.)

Ed. 484 Methods of Teaching English as a Foreign Language 2 hours
(See English 484.)

Ed. 487-488 Independent Study 2 or 4 hours

Ed. 490 Senior Project 2-8 hours

Special Education

Sp. Ed. 205 Introduction to the Exceptional Learner 2 hours

This course is designed to serve as an integral part of the preparation of teachers of Specific Learning Disability students and others who are involved with exceptional students educationally. Recent social, legal, and educational trends related to the handicapped student will be discussed, as well as the characteristics and educational methods for various areas of exceptionalities.

Sp. Ed. 206 Educating the Specific Learning Disabilities Student 4 hours
This course is designed to introduce the characteristics of the Specific Learning Disability (SLD) student and models of intervention, mainstreaming, and roles of resource room, consulting room, and teachers of self-contained classrooms. A field placement is required for this course. *Prerequisite: Sp. Ed. 205.*

Sp. Ed. 320 Teaching Methods for Specific Learning Disabilities: Early and Middle Childhood 2 hours

This course is designed to instruct specific learning disability (SLD) teachers in methods and models of intervention and synthesis of the diagnostic-prescriptive model. This is a SLD methods course for early and middle childhood that stresses intervention strategies for different levels of severity. *Prerequisite: Sp. Ed. 206.*

Sp. Ed. 410 Tests and Measurements 2 hours

This course is designed to provide teachers with knowledge of and experience with a variety of assessment instruments for the purpose of educational evaluation placement, diagnosis, and intervention. Students will administer formal tests and develop informal tests as a means of acquiring skills with standardized, norm-referenced, criteria-referenced, diagnostic, and achievement tests to provide appropriate educational programs for the learning disabled student.

Prerequisite: Ed. 348. (May be taken for credit as Psychology 410.)

Sp. Ed. 470 Observation and Directed Teaching: Specific Learning Disabilities 4 hours

Directed half-semester observation and student teaching in schools with partial assignments in appropriate specific learning disabilities placements, to include weekly student teaching seminars and a minimum of 150 clock hours actual teaching. Students must make application for student teaching prior to advance registration. Other course or activities which might interfere with student teaching are not permitted. Concurrent with enrollment in the Education Year and Education 470 (4 hours credit). Credit-No Credit.



English

Aims

To help students to develop and maintain the ability to write clear and effective English; to guide them toward an increased understanding and critical appreciation of their literary heritage; to help prepare them for graduate and professional study. In addition, the department provides programs that prepare students for certification as teachers of English and Language Arts.

Requirements for Field of Concentration

1. Concentration in English requires a minimum of 32 hours in the department, exclusive of the Senior Project. The following courses are required: 140 or 150, 4 hours from Eng. 265, 266, 268, 325-326, 330, 341-342, 477. Students should also elect at least one Seminar in

British Literature (courses numbered 420-429), and at least one Seminar in American Literature (courses numbered 450-459). These seminars, together with other advanced courses or independent study, will extend the student's knowledge of one or two areas of literature, provide background for the Senior Project, and help to prepare for future study or a career. Thus, the program of a student preparing for the law or another profession will be different from that of a student preparing for graduate study in English or for secondary school teaching.

2. At least 12 hours in another department should be included in the field of concentration. These courses may be related to the student's special interests or vocational plans.

3. Students planning to attend graduate or professional schools should prepare to meet foreign language reading requirements.

4. Students are not accepted for concentration in English later than the beginning of their fifth semester unless they have completed English 140 (or 150) and either English 325-326 or English 341-342.

5. Students concentrating in English are expected to attain a minimum grade of C in all courses in the department.

6. Only students who have completed the following courses or their equivalents will be recommended for certification to teach English in secondary school: Eng. 140, 215, 325-326, 341-342, 370, 375; Comm. 335, FAA 220, Eng. 290 or Ed. 290, Eng. 480 or Ed. 480; two courses from Eng. 100, 125, 150, 213, 217, 490, or FAA 217; two courses from Eng. 261, 262, 263, 264, 330, 350, 420-429, 440-449, 450-459, 477, or 270; one course from Eng. 265, 266, 268. A second teaching field also is required. Students interested in teaching should consult the Education Department listings for required courses in Professional Education.

Writing Proficiency Program

The Writing Proficiency Program is administered by the English Department. Students should complete the program and meet the writing proficiency requirement for graduation before the beginning of the senior year.

Students must achieve and maintain an above-average level of proficiency in expository writing by taking the annual Writing Qualification Test or by satisfactory completion of selected writing courses offered by the English Department.

Students who choose to satisfy the requirement by enrolling in writing courses may do so by electing from the following: English 100, 120, 125, 140, 150, 205, 213, 215, or 351. No more than one course per academic year will apply to the requirement. See below for the number of courses needed to satisfy the writing proficiency requirement.

The Department of English will certify to the Registrar that a student has satisfied the writing proficiency requirement for graduation when proficiency has been demonstrated in one of the following ways:

1. By achieving a high level of proficiency on both the first Writing Qualification Test, taken in November of the freshman year, and the second Writing Qualification Test, taken in April of the sophomore year; or by achieving a grade of C+ or better in a writing course taken instead of either or both of these tests. *A student whose proficiency is certified in this way is not required to take additional tests or courses.*

2. By taking the first Writing Qualification Test in November of the freshman year and achieving a high level of proficiency on the third test, taken in April of the junior year.

3. By achieving a grade of C+ or better in a writing course taken in the junior year.

4. By achieving a grade of B or better in any writing equivalency course taken either the freshman or sophomore year.

*Students who have not met the writing proficiency requirement before the beginning of their seventh semester must enroll in English 120, a non-credit, non-graded course in expository writing. Special Writing Qualification Tests are given as part of this course, and students must continue in the course until they have achieved a high level of proficiency on one of the special tests. Special Writing Qualification Tests are given to seniors *only* when enrolled in the course.*

Special arrangements are made for students who transfer from other colleges. Transfer students should consult the Department of English immediately upon enrolling at Bethany.

Writing tests are given according to the following schedule:

November

Writing Qualification Test: Freshmen (Required)

February

Diagnostic Qualification Test: All students entering in February

April

Writing Qualification Test: Sophomores (Advisory) and Juniors (Required)

Eng. 100 College Composition 4 hours
A basic course for training and practice in the process of writing effective essays from the prewriting stage through final revision and polishing. Emphasis is on audience and purpose, point of view, organization and style. Formal assignments encourage students to write the types of essays they are likely to encounter in other college courses, including documented reports.

Eng. 120 Expository Writing Non-credit
Training and practice in writing clear and effective expository prose. After an initial diagnosis, an individual program is designed for each student. *Offered as a substitute for English 100 and an alternative to English 120. (May not be taken on a credit-no credit basis.)*

Eng. 125 Expository Writing Workshop 2 hours
Training and practice in writing clear and effective expository prose. After an initial diagnosis, an individual program is designed for each student. *Offered as a substitute for English 100 and an alternative to English 120. (May not be taken on a credit-no credit basis.)*

Eng. 140 Introduction to Literature 4 hours
Introduction to the study of poetry, drama, and fiction. Emphasis is on the development of techniques for the analysis and evaluation of poetry, drama, and fiction and on the writing of literary essays. *Open to all students. Required for concentration in English.*

Eng. 150 Honors Freshman English 4 hours
A course for freshmen of superior ability and accomplishment. Introduction to the principles of critical reading and writing and to the analysis and evaluation of poetry, drama, and fiction. Intensive practice in expository and imaginative writing with emphasis upon the achievement of clarity and accuracy. *May be substituted for Eng. 140 to fulfill requirement for concentration in English and prerequisites for English courses. Enrollment by invitation only.*

Eng. 160 Introduction to Film 4 hours
In this course, students will study the film as a technical artifact, an art object, a mirror of society, and a moral statement. They will see twelve classic films such as Chaplin's *City Lights*, Resnais's *Hiroshima Mon Amour*, Bergman's *Virgin Spring*, and Hitchcock's *Psycho*. *Fee: \$15.*

Eng. 205 Writing for Business and Industry 2 hours
Writing formal and informal reports, summaries, business letters, job descriptions, applications and resumes. Each student will complete approximately 10 writing assignments. *Prerequisite: English 100 or demonstrated competence in expository writing.*

Eng. 209 Technical Writing 4 hours
A workshop for training and practice in the written communication of specialized information to audiences with varying levels of knowledge. Emphasis is on the analysis of audiences and purposes, the selection and organization of information, the creation of informative graphics, and the manipulation of conventional formats to develop concise and effective instruction sets, descriptive analyses, abstracts, occurrence reports, literature reviews, feasibility studies, proposals, investigative reports and other types of writing usually required of professionals. Students will make use of the College's computer facilities for word processing and for generating graphs, charts and lists.

Eng. 213 Advanced Expository Writing 2 hours
Intensive practice in writing expository prose with emphasis upon the achievement of literary excellence. *Prerequisite: English 100 or the equivalent. Enrollment limited to 15 students with preference given to juniors and seniors.*

Eng. 215 Creative Writing 2 hours
Training and practice in the creative aspects of expository and imaginative writing. Students write essays, sketches, short fiction, poems, and dramatic scenes. *Required for students preparing to teach secondary school English. Prerequisite: English 100 or its equivalent. Enrollment limited to 15 students with preference given to juniors and seniors.*



Eng. 217 Imaginative Writing 2 hours
Intensive practice in writing fiction, poetry, or plays with emphasis upon the achievement of literary excellence. Individual assignments and frequent conferences. *Prerequisites: English 140 or 215 and permission of the instructor. Enrollment limited to 12 students with preference given to juniors and seniors. (May be taken for credit as Fine and Applied Arts 217.)*

Eng. 261-262 British Novel 2 hours each
Development of the British novel from the 18th century to the present. 261: Defoe through Dickens. 262: Hardy to the present.

Eng. 263-264 American Novel
2 hours each

Development of the American novel from the 19th century to the present. 263: Beginnings through World War I. 264: 1920s to the present.

Eng. 265 Classical Western Literature
2 hours

A study of the writings of the major authors in Ancient Greece and Rome. Emphasis is on the work of Homer, Virgil, Ovid, and the Greek dramatists.

Eng. 266 Masterpieces of Western Literature 2 hours

A study of major works from the Middle Ages through the nineteenth century. Such works as the following will be considered: Dante's *Divine Comedy*, Rabelais' *Gargantua and Pantagruel*, Cervantes' *Don Quixote*, Swift's *Gulliver's Travels*, Goethe's *Faust*, and Tolstoy's *Anna Karenina*.

Eng. 268 Modern World Literature
4 hours

A study of the work of writers representing the diverse cultural traditions of the modern world. In addition to the works representing the western tradition, works will be studied representing such traditions as the Eastern European, the middle Eastern, the African, the Latin American and the Oriental.

Eng. 270 Shakespeare 4 hours
Rapid reading of the major plays with emphasis upon Shakespeare's themes, motifs, language and characterization. (May be taken for credit as Fine and Applied Arts 270.)

Eng. 280-289 Colloquium in Literature
2 or 4 hours each

Courses for the discussion of special topics in literature. *Enrollment in each course limited to 20 students.*

Eng. 289 Children's Literature 2 hours
(See Education 289.)

Eng. 290 Literature and Adolescence
2 hours

Study of important works about or of special interest to young people of junior high school through high school age. Techniques of presenting the works are considered. Readings are primarily in short stories and novels. *Required for students preparing to teach secondary school English.* (May be taken for credit as Education 290.)

Eng. 325-326 British Literature
4 hours each

Development of British literature from the beginning through the Victorian Period. First semester: from *Beowulf* through Milton. Second semester: from the Restoration to the end of the 19th century. *Prerequisite: Eng. 140 or permission of the instructor. Required for concentration in English.*

Eng. 330 Twentieth Century British Literature 2 hours

Study of important works of British literature during this century. Writers to be included: Eliot, Yeats, Auden, Woolf, Joyce, and Pinter. *Prerequisite: Eng. 140. Required for concentration in English.*

Eng. 341-342 American Literature
4 hours each

Development of American literature from the Colonial Period to the present with emphasis upon the writers of the 19th and 20th centuries. *Prerequisite: Eng. 140 or permission of the instructor.*

Eng. 351 Literary Criticism 4 hours
Study of the history of literary criticism, literary theory, and applied approaches to literary criticism. Special emphasis will be placed on the preparation of essays which apply various theories and demonstrate various critical points of view.

Eng. 370 Development of Modern English 4 hours

History of the English language from Anglo-Saxon to modern English with emphasis upon the structure and vocabulary of the latter. *Required for students preparing to teach secondary school English. Not open to Freshmen.*

Eng. 375 English Grammar 2 hours
The description and analysis of the grammar of the English language. Various grammatical systems are considered, such as the traditional, the structural, and the transformational-generative. *Required for students preparing to teach secondary school English.*

Eng. 420-429 Seminar in Major Authors
2 or 4 hours each

Advanced study of one or more major British, American, or European authors. *Prerequisite: previous study of the author or authors in a survey course. Enrollment in each course limited to 12 students.*

Eng. 421 Hemingway 2 hours
Study of selected fiction by Ernest Hemingway. Emphasis will be on the Nick Adams stories, "A Farewell to Arms" and "The Old Man and the Sea."

Eng. 423 Johnson and Boswell 4 hours
Study of the life and selected works of Samuel Johnson and of James Boswell as journalist and biographer.

Eng. 440-449 Seminar in British Literature 2 or 4 hours each
Advanced study of a period, movement, or tradition in British literature. *Prerequisite: previous study of the period, movement, or tradition in a survey course. Enrollment in each course limited to 12 students.*

Eng. 443 The Heroic Tradition in British Narrative 4 hours
Study of the development of the heroic tradition from the Greek epics through medieval and Renaissance epics and romances to modern novels. Students will read *Iliad*, *Beowulf*, selected Arthurian works, *Paradise Lost*, and Tolkien's *Lord of the Rings*.

Eng. 444 Age of Johnson 4 hours
Study of the major prose, poetry, and drama of the mid-eighteenth century with emphasis upon the work of Samuel Johnson and the members of his circle, including Boswell, Goldsmith, and others.

Eng. 450-459 Seminar in American Literature 2 or 4 hours each
Advanced study of a period, movement, or tradition in American literature. *Prerequisite: previous study of the period, movement, or tradition in a survey course. Enrollment in each course limited to 12 students.*

Eng. 450 Recent American Literature 4 hours
A study of American poetry, drama and fiction since World War II. Emphasis is on the analysis of works representing the various ideas, techniques, styles and movements characterizing the writing of the last forty years.

Eng. 456 The 1920's 4 hours
A study of the poetry, drama, fiction, and critical writings of the 1920's. Emphasis is on such major writers as Pound, Eliot, Fitzgerald, Hemingway, Faulkner, and O'Neill, but other important writers will also be studied.

Eng. 457 Hawthorne, James, and Faulkner 4 hours
A study of critical and fictional works of Hawthorne, James, and Faulkner. Emphasis is on ideas, themes, and techniques.

Eng. 477 English Seminar 2 hours
Reading and research designed to help students review and organize their knowledge of literature. *Prerequisites: English 140 or 150, 325-326, 330, 341-342 or permission of the instructor.*

Eng. 480 Methods of Teaching English 2 hours
Teaching of high school composition and literature. Literary analysis, systems of grammar, and reading improvement. (May be taken for credit as Education 480.)

Eng. 483 Theory and Practice of Teaching Composition 2 hours
An examination of historical and current theories of composition as a conceptual background for both teaching and writing. Students will study research and theory on the writing process. Students will practice both writing and teaching writing.

Eng. 484 Methods of Teaching English as a Foreign Language 2 hours
Directed study of techniques for teaching English vocabulary, spelling, and grammar to native speakers of other languages. Practical experience through tutoring. (May be taken for credit as Education 484.) *Offered upon request.*

Eng. 487-488 Independent Study 2 or 4 hours each
Individual study in any area of English for which the student is qualified. Independent study is offered only in areas not included in other courses in the department. *Prerequisites: Adequate preparation to undertake the study as determined by the instructor; permission of the head of the department.*

Eng. 490 Senior Project 2-8 hours
Generally consists of a major critical paper on a topic developed from at least one of the student's elective courses in the department. During the junior year, the student should determine an area of interest and make a preliminary investigation of it after consulting with his or her mentor (the faculty member best qualified to assist in the project). Reading and research should continue during the student's senior year, and much of the final semester should be devoted to preparation of the paper. Sometimes, the project may take other forms. *Students wishing to undertake an unusual project must consult with the head of the department no later than the beginning of the fourth semester. Credit for the senior project is not included in the total number of hours required for concentration in English.*



Fine and Applied Arts

Aims

The Fine and Applied Arts Department provides study in the visual arts, music, theatre, and communication design. The purpose of the department is to give expression to the aesthetic unity of the various forms and modes of the arts and, at the same time, to permit students to pursue practice in the arts for both personal satisfaction and professional preparation. Emphases include 1) the cultural foundations and

traditions of the arts, including studio and performance areas, 2) graphics and communication design, and 3) the professional aspects of arts management, including internship opportunities.

Requirements for Field of Concentration

Students concentrating in Fine and Applied Arts will take Fine and Applied Arts 101-102 and 110-111. In addition, the concentration requires completion of one of the following departmental emphases: 1) Two-Dimensional Art: 16 hours; 2) Three-Dimensional Art: 20 hours; 3) Communication Design: 26 hours; or 4) Theatre: 22 hours. Also each student must complete FAA 477 and a Senior Project. Students interested in the field of Arts Management should complete one of the emphases above, the Professional Core Program in Management, and the course in Fine and Applied Arts 399.

Foundation Courses

FAA 101 Introduction to Art 4 hours
Historical and aesthetic study of the visual arts from the ancient world to the present. Representative master works of art are studied, and consideration is given to aesthetic functions and values.

FAA 102 Introduction to Music 4 hours
Historical and aesthetic study of music from Gregorian Chant to the present. Representative master works of music are studied, and consideration is given to aesthetic functions and values.

FAA 110-111 Dramatic Literature and Theatre Development 4 hours each
A survey of drama and theatre architecture and design with emphasis on both primary and secondary literature in both historical and aesthetic context.

FAA 120 Music as Art and Science 2 hours
This course provides an aural study of classical and popular music within an aesthetic perspective. It surveys various musicians within various genres and does not presuppose any previous musical background.

FAA 340 Art Activities in the Elementary Schools 4 hours
Study of the theories and goals of art education in the elementary school with emphasis on the child's growth and development through art. Exploration of art techniques is included.

FAA 399 Fine Arts Management 2 hours
The study of management principles and practices as applied to agencies and institutions in the various fields of the arts, such as museums, galleries, symphonies, theatres, and others.

FA 477 Senior Seminar 2 hours
Review of the fine arts area concentrating upon the student's field of emphasis. *Required of all seniors in the fine arts field.*

FAA 481 Methods and Materials in Teaching Elementary School Music 2 hours
The aims and values of elementary school music will be studied, opportunities to develop teaching techniques will be provided, and introductions to standard materials will be made. *Required of all elementary education majors.*

FAA 487-488 Independent Study 2-4 hours

FAA 490 Senior Project 2-4 hours
Recommended to begin during the second semester of the junior year.

Two-Dimensional Art

FAA 200 Introduction to Two-Dimensional Design 4 hours

Basic course work in the theories and practice of two-dimensional design; study of the elements and materials in relation to design potentials with practical applications. *Prerequisite for those emphasizing art.*

FAA 205 Still-Life and Landscape 2 hours

Concentrated activity in drawing using a variety of drawing media. Primary emphasis is placed on still life and landscape.

FAA 206 Figure and Portraiture Drawing 2 hours

Concentrated activity in drawing using a variety of drawing media. Primary emphasis is placed on figure drawing and portraiture.

FAA 300 Watercolor Painting 2 hours
Creative exploration of the techniques of watercolor and acrylics, using still life, landscape, portraiture, and imaginative subject matter in a variety of styles.

FAA 301 Oil Painting 2 hours
Creative exploration of the techniques of oil paints and compatible media, using still life, landscape, portraiture, and imaginative subject matter in a variety of styles.

FAA 305 Advanced Still-Life and Landscape Drawing 2 hours
Advanced problems in drawing with a concentration in a specific area, including still life, landscape, and imaginary drawing. Emphasis on composition. *Prerequisite: FAA 205.*

FAA 306 Advanced Figure and Portraiture Drawing 2 hours
Advanced problems in drawing with a concentration in a specific area, including figure drawing and portraiture. *Prerequisite: FAA 206.*

Three-Dimensional Art

FAA 200 Introduction to Two-Dimensional Design 4 hours
(See Two-Dimensional Art Emphasis)

FAA 201 Introduction to Three-Dimensional Design 4 hours
Basic course work in the theories and practice of three-dimensional design; study of the elements and materials in relation to design potentials with practical applications. *Prerequisite for those emphasizing three-dimensional art.*

FAA 210 Ceramics I 2 hours
Studio experience in forming, firing, and glazing pottery, including ceramic sculpture.

FAA 310 Ceramics II 2 hours
Advanced problems in media and subject matter selected by the student with the advice of the instructor. *Prerequisite: FAA 210.*

FAA 320 Sculpture I 2 hours
Creative expression in three-dimensional forms. Students work with materials that are readily available and easily handled such as wood, wire, plaster, and clay. *Prerequisite: FAA 201 or permission of the instructor.*

FAA 420 Sculpture II 2 hours
Advanced problems in media and subject matter selected by the student with the advice of the instructor. *Prerequisite: FAA 320.*

FAA 425 Printmaking 4 hours
The study of printmaking processes emphasizing creative expression through such techniques as relief, intaglio, planography, and serigraphy. *Prerequisite: FAA 205 or permission of the instructor.*

Communication Design

FAA 200 Introduction to Two-Dimensional Design 4 hours
(See Two-Dimensional Art Emphasis.)

FAA 302 Airbrush Techniques 2 hours
Beginning through advanced airbrush techniques. Exploration of various hues — graphic design, photo retouching, ceramics, and painting.

FAA 303 Lettering and Layout 4 hours
Introduction to calligraphy, typography, letter forms, and layout, with emphasis on design, legibility, and creative practice.

FAA 304 Design Applications 4 hours
Emphasis on problem solving experiences as related to visual communications. The mechanics and psychology of two-dimensional and three-dimensional design are explored as a foundation for graphic design.

FAA 404 Television Graphics 4 hours
Emphasis on the design of visual symbols for television. Combines principles of graphic art with the particular requirements of television production.

FAA 405 Communciation Design Practice 4 hours
The study of professional procedures, structures, communication functions, and processes as applied to areas of graphic design. *Prerequisite: FAA 304.*

FAA 406 Computer Graphics and Applied Design 4 hours
Practical applications of graphics and communication design techniques as related to the computer and other technological aids. *Prerequisite: FAA 405.*

Music

FAA 125-126 College Choir 1 hour each
Preparation for performance of choral music. *Membership limited. Enrollment by audition.*

FAA 131-132 Brass Ensemble 1 hour each
Study and preparation for performance of music for wind instruments from the 17th through 20th centuries. Enrollment by audition.

FAA 135-136 Chamber Ensemble

1 hour each

Study and preparation for performance of the standard chamber literature; quartets, trios, and other works according to the instrumentalists available. *Enrollment by audition.*

FAA 137-138 Jazz Band 1 hour each

Study and preparation for performance of arrangements for large jazz band. Designed to develop an appreciation for the musical styles of Glenn Miller, Woody Herman, Stan Kenton, and others. *Enrollment by audition.*

FAA 161-162 Harpsichord 1 hour each

Private instruction in the techniques, literature and history of the harpsichord. *Enrollment by permission of the instructor.*

FAA 163-164 Pipe Organ 1 hour each

Private instruction in the techniques, theory and literature of the pipe organ.

Prerequisites: proficiency on the piano equivalent to the Bach Inventions, early sonatas of Beethoven, Haydn, or Mozart. Enrollment by permission of the instructor.

FAA 165-166 Piano 1 hour each

Private instruction of the techniques, theory, and literature of the piano. *Enrollment by permission of the instructor.*

FAA 167-168 Strings 1 hour each

Private instruction in the techniques, theory, and literature of violin, viola, cello, or bass. *Enrollment by permission of the instructor.*

FAA 169-170 Classical Guitar 1 hour each

Private instruction in the techniques, theory, and literature of the classical guitar. *Enrollment by permission of the instructor.*

FAA 171-172 Winds 1 hour each

Private instruction in the techniques, theory, and literature of the brass and woodwind instruments. *Enrollment by permission of the instructor.*

FAA 173-174 Voice 1 hour each

Private instruction in the technique, theory, and literature of voice. Open to all students who have adequate native ability. *Enrollment by permission of the instructor.*

Theatre**FAA 151 Fundamentals of Stage**

Construction 2 hours

FAA 152 Theatre Lighting 2 hours**FAA 153 Theatre Make-Up** 2 hours**FAA 154 Costuming** 2 hours

Not required for Theatre Emphasis in FAA.

FAA 155 Scene Painting 2 hours

Techniques in painting stage scenery used in stage design: spattering, dry and wet scumbling, dry brushing, stippling, feather dusting, and rag rolling. *Not required for Theatre Emphasis in FAA.*

FAA 215 Dance for Non-Dancers 2 hours

The development of beginning dance skills with emphasis upon improvisational dance modes and creative body language. *Not required for Theatre Emphasis in FAA.*

FAA 217 Imaginative Writing 2 hours

(See English 217.)

FAA 220 Beginning Acting 2 hours

Movement, various styles, improvisations, projections of character, and speech technique. The course includes a 10-20 minute planned and rehearsed program that demonstrates skills acquired in improvisation and body and voice techniques.

FAA 222 Advanced Acting 2 hours

Scene study as a unit of theatrical form. Scenes from various periods to be directed and performed. Focus on interaction between characters.

FAA 230 Children's Theatre 2 hours

The development of techniques required in writing and performing before children. Focus is on the preparation of children's theatre projects to be presented before groups of young people or to be televised.

FAA 232 Musical Comedy 2 hours

Study of musical comedy scores and libretti, basic principles of musical comedy singing, dancing, and acting, and other fundamentals of the genre.

FAA 270 Shakespeare 4 hours

(See English 270.)

FAA 330 Directing 2 hours

Fundamentals of staging, blocking, movement, stage business, tempo, script analyses, casting, and rehearsal planning. The course includes preparation of a prompt book for a one-act play to be directed for public performance. *Prerequisite: FAA 220.*

FAA 416 Opera 2 hours

This course is designed to introduce the general student to operatic techniques and conventions. The principle emphasis will be on the ways in which music enhances dramatic elements in operas of Mozart and Verdi. No technical knowledge of music is required. *Not required for Theatre Emphasis in FAA.*

Foreign Language

Aims

To familiarize students with the language and literature of the French, German, and Spanish speaking peoples; to help students understand a culture other than their own; and to assist students in preparing for careers requiring foreign language skills. The program also provides students interested in research with a reading knowledge of a foreign language, and it helps travelers to foreign countries acquire basic conversation skills.

Requirements for Field of Concentration in French, German, or Spanish

A minimum of 24 hours in the target language (not including French 101-102, German 101-102, or Spanish 101-102) plus Foreign Language 425, and a Senior Project.

A working knowledge of a foreign language other than the one chosen as the field of concentration is recommended. Every student is required to spend a minimum of one semester studying in a country where his or her major foreign language is spoken. Students expecting to teach a foreign language must complete Foreign Language 480 and the appropriate civilization and survey of literature courses.

Foreign Language majors should consider a strong second field in an area related to career goals.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach French, German or Spanish in secondary school. French – major: Fr. 101, 102, 200, either 300 or 301, 313, either 351 or 352, F.L. 425, 480 and any other four hours in French. Second field: Fr. 101, 102, 200, either 300 or 301, either 351 or 352, F.L. 480 and any other four hours of French. German – major: Ger. 101, 102, 200, either 300 or 301, 312, 351 or 352. F.L. 425, 480 and any other four hours in German. Second field: Ger. 101, 102, 200, either 300 or 301, 351 or 352. F.L. 480 and any other four hours of German. Spanish – major: Sp. 101, 102, 200, either 300 or 301, 351 or 352, 310 or 311, F.L. 425, 480 and any other six hours of Spanish. Second field: Sp. 101, 102, 200, either 300 or 301, 351 or 352, F.L. 480 and any other four hours in Spanish. See the Education Department listings for required Professional Education courses. A second teaching field is required.

French

Fr. 101 Basic French I 4 hours
Fundamentals of pronunciation, grammar, reading and composition. Emphasis on audio-oral approach to develop basic skills of comprehension and speaking. Introduction to French and Francophone cultures and issues. *Intended primarily for students who have no acquaintance with the language. Four hours of oral practice in addition to four hours of classroom work per week.*

Fr. 102 Basic French II 4 hours
Continuation of French 101. *Prerequisite: Fr. 101 or equivalent.*

Fr. 200 Intermediate French 4 hours
Grammar review, reading, speaking and writing. Study of French and Francophone cultures and introduction to the great works of literature. *Prerequisite: French 102 or equivalent.*

Fr. 300 Conversation and Composition: The Living Language 4 hours
French and American life styles are compared through discussions, skits, and compositions designed to improve the student's communication skills in French. Topics center around the school, home life, and interpersonal relationships. A feature of this course is participation in the weekly meeting of the French Club at the dinner hour. *Prerequisite: Fr. 200 or equivalent.*

Fr. 301 Conversation and Composition: Francophone World 4 hours
While improving skills of spoken and written communications in French, the student becomes acquainted with contemporary issues in the French-speaking world. A feature of this course is participation in the weekly meeting of the French Club at the dinner hour. *Prerequisite: Fr. 200 or equivalent.*

Fr. 313 France 4 hours
Introduction to France, with special attention to its political and cultural history, contemporary institutions, activities, customs and values. Cross-cultural comparisons and contrasts of France and the United States are included.

Fr. 351 Survey of French Literature I 4 hours
Survey of French literature from the earliest periods to the end of the 18th century. Readings in French from an anthology and certain reference works. Conducted in French. *Prerequisite: Fr. 200 or equivalent.*

Fr. 352 Survey of French Literature II 4 hours
Survey of French literature of the 19th and 20th centuries. Introduction to *explication de texte* techniques. Readings in French from an anthology and certain reference works. Conducted in French. *Prerequisite: Fr. 200 or equivalent.*

Fr. 400 Advanced French Grammar 2 hours
To facilitate correctness in writing and speaking, the grammatical structure of the French language is examined. *Prerequisite: Fr. 200 or equivalent.*

Literary Studies

Seminars highlighting major literary movements and genres from France's past and present.

Fr. 411 19th Century Novel 2 hours
French romanticism, realism, and naturalism are examined through the works of such novelists as Hugo, Stendhal, Flaubert, Balzac, and Zola. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 412 Contemporary Novel 2 hours
Study of the development of 20th century French fiction, from Proust and Gide to the New Novel. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 413 Philosophers of the French Enlightenment 2 hours
Examination of representative works by major 18th century French thinkers, including Montesquieu, Voltaire, Diderot, and Rousseau. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 414 French Existentialism in Literature 2 hours
Study of France's existentialists, including Sartre, Camus, and de Beauvoir. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*



Fr. 415 17th Century Classical Theatre 2 hours
Study of the great classical dramatists of France: Corneille, Moliere, and Racine. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 recommended.*

Fr. 416 Poetry: From Romanticism to Surrealism 2 hours
Analysis of 19th and early 20th century French poetry, including the works of Lamartine, Hugo, Gautier, Baudelaire, Rimbaud, Apollinaire, Breton, and others. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 487-488 Independent Study
2 or 4 hours each

Fr. 490 Senior Project 2-8 hours

German

Ger. 101 Basic German 4 hours
Fundamentals of pronunciation, grammar, reading, and composition. Emphasis on audio-oral approach to develop basic skills of comprehension and speaking. German-speaking countries and their global relationships. *Primarily for students who have no acquaintance with the language. Four hours of oral practice in addition to four hours of classroom work per week. Prerequisite: Ger. 101 or equivalent.*

Ger. 102 Basic German II 4 hours
Continuation of German 101. *Prerequisite: Ger. 101 or equivalent.*

Ger. 200 Intermediate German 4 hours
Grammar review, reading, speaking, writing. Emphasis on the variety of cultures and issues within German-speaking countries, including Third World guest workers. *Prerequisite: Ger. 102 or equivalent.*

Ger. 300 Conversation and Composition I 4 hours
Discussion of life in Germany. Designed to improve communication skills. Brief oral and written reports. A feature of this course is participation in the weekly meeting of the German Club at the dinner hour. *Prerequisite: Ger. 200 or equivalent.*

Ger. 301 Conversation and Composition II 4 hours
While improving skills of spoken and written communication in German, the student will discuss contemporary problems. A feature of this course is participation in the weekly meeting of the German Club at the dinner hour. *Prerequisite: Ger. 200 or equivalent.*

Ger. 302 German Business Correspondence 2 hours
Designed to prepare students for possible employment in German-American firms through the development of skills in business letter writing and familiarization with German technical terms in business and banking. *Prerequisite: Ger. 200 or equivalent.*

Ger. 306 Modern German Short Stories 2 hours
Selected stories by contemporary writers are read and discussed in German. *Prerequisite: Ger. 200 or equivalent.*

Ger. 308 Modern German Dramas 2 hours
Plays by modern authors, including Brecht and Dürrenmatt, are read and discussed in German. *Prerequisite: Ger. 200 or equivalent.*

Ger. 312 German Civilization 4 hours
Designed to acquaint the student with the history, culture, and people of the German speaking countries, the two Germanies, Switzerland and Austria.

Ger. 351 Survey of German Literature I 4 hours
Survey of German literature from the earliest periods to the beginning of the 19th century. Readings in German from an anthology. Conducted in German. *Prerequisite: German 200 or equivalent.*

Ger. 352 Survey of German Literature II 4 hours
Survey of German Literature from the Romantic period to the present. Readings in German from an anthology. Conducted in German. *Prerequisite: German 200 or equivalent.*

Ger. 413 German Literature in the 20th Century 4 hours
Introduction to some of the chief authors, works, and literary movements of the 20th century. Readings (in German) include representative works by Mann, Kafka, Hesse, Grass, and Böll. *Prerequisite: A good reading knowledge of German. Ger. 351, 352 are recommended.*

Ger. 487-488 Independent Study
2 or 4 hours each

Ger. 490 Senior Project 2-8

Spanish

Span. 101 Basic Spanish 4 hours
Fundamentals of pronunciation, grammar, reading, and composition. Emphasis on audio-oral approach to develop basic skills of comprehension. Introduction to Spanish and Latin American cultures and issues. *Intended primarily for students who have no acquaintance with the language. Four hours of oral practice in addition to four hours of classroom work.*

Span. 102 Basic Spanish II 4 hours
Continuation of Spanish 101. *Prerequisite: Span. 101.*

Span. 200 Intermediate Spanish 4 hours
Grammar review, speaking, writing and study of the evolving Hispanic cultures in the contemporary world. *Prerequisite: Span. 101-102 or equivalent.*

Span. 300 Spanish Conversation and Composition: Spain 4 hours
Intensive training in spoken and written Spanish with emphasis on current events in Spain. Oral reports are based on readings from newspapers, magazines and literary works. A feature of this course is participation in the weekly meeting of the Spanish Club at the dinner hour. *Prerequisite: Span. 200 or equivalent.*

Span. 301 Spanish Conversation and Composition: Latin America 4 hours
Intensive training in spoken and written Spanish with emphasis on current events in Latin America. Oral reports are based on readings from newspapers, magazines and literary works. A feature of this course is participation in the weekly meeting of the Spanish Club at the dinner hour. *Prerequisite: Span. 200 or equivalent.*

Span. 302 International Spanish Correspondence and Translation 4 hours
Designed to prepare students of Spanish for possible employment in international government and commercial professions through the development of skills in business and diplomatic letter writing, familiarization with technical Spanish terms, instruction in methods of modern translation, and comprehensive preparation for bilingual positions.

Span. 310 Spanish American Civilization 2 hours
Development of Latin America from the pre-Columbian era to the present day in art, music, drama, history, and literature. Each student does research on a specific project selected in consultation with the instructor. Conducted in English.

Span. 311 Spanish Civilization 2 or 4 hours
Spain's influence on the history, art, music, drama, literature, and science of the world. Each student does research on a specific project selected in consultation with the instructor. Conducted in English.



Span. 351 Survey of Spanish Literature I 4 hours
Survey of Spanish literature from the Middle Ages through the 17th century. Readings in Spanish from the Medieval, Renaissance and Baroque periods. Conducted in Spanish. *Prerequisite: Span. 200 or equivalent.*

Span. 352 Survey of Spanish Literature II 4 hours
Representative authors and works from the Neoclassic, Romantic and Realist periods as well as the various 20th century literary movements. Conducted in Spanish. *Prerequisite: Span. 200 or equivalent.*

Span. 353 Survey of Spanish American Literature 4 hours
Great authors and works of Spanish American literature from the beginning to the present. Conducted in Spanish. *Prerequisite: Span. 200 or equivalent.*

Literary Studies

Span. 403 Literature of Spain: The Generation of '98 and the 20th Century 4 hours
Works of the novelists and philosophers who searched for the reasons for Spain's decline at the end of the 19th century, and of representative authors of the 20th century. *Prerequisite: Span. 200 or equivalent.*

Span. 406 Contemporary Literature in Spanish America 4 hours
Survey of modern novels and their expression of important aspects of Latin American life. *Prerequisite: Span. 200 or equivalent.*

Span. 451 Literature of Spain: 19th Century Romantics 2 hours
Poetry, plays, and legends from the first half of the 19th century. *Prerequisite: Span. 200 or equivalent.*

Span. 452 Literature of Spain: 19th Century Realists 2 hours
The regional novel of customs. Psychological, social, and thesis novels of the last half of the 19th century. *Prerequisite: Span. 200 or equivalent.*

Span. 453 Literature of Spain: The Golden Age 2 hours
Poetry and drama of the 16th and 17th centuries when Spain was at its artistic and literary height. *Prerequisite: Span. 200 or equivalent.*

Span. 454 Literature of Spain: Don Quixote 2 hours
Cervantes' masterpiece presenting the contrast of idealism and imagination versus realism and practicality in a great novel. *Prerequisite: Span. 200, or equivalent.*

Span. 487-488 Independent Study
2 or 4 hours each

Span. 490 Senior Project 2-8 hours

Greek

Gr. 301 Hellenistic Greek I 4 hours
Introduction to the grammar of the Greek language in the Hellenistic Age. Primary emphasis is placed on the structure of the Greek of the New Testament.

Gr. 302 Hellenistic Greek II 4 hours
Continuation of Gr. 301 with greater emphasis upon syntax and reading of the Greek New Testament.

Gr. 401 Hellenistic Greek Readings I 4 hours
For students who have had a basic course in the Greek language. Facilitates the reading and interpretation of texts from the Septuagint, the New Testament, papyri, and early Christian writers.

Gr. 402 Hellenistic Greek Readings II 4 hours
Continuation of Gr. 401 with readings in early Christian literature.

Gr. 487-488 Independent Study
2 or 4 hours each

Foreign Language

F.L. 320 Seminar in Bilingual-Bicultural Studies 2 hours
A study of the needs of bilingual-bicultural education in the U.S., its history, current theories and practices.

F.L. 425 Introduction to Linguistics 2 hours
Basic concepts and terminology of linguistics. Required of all majors in the department.

F.L. 480 Methods and Materials in Teaching Foreign Languages 2 hours
Methods, teaching materials, lesson planning, and extracurricular activities necessary for the teacher of French, German, or Spanish as a foreign language. (May be taken for credit as Education 480.)

F.L. 481 Foreign Languages for Middle Childhood 2 hours
Methods, teaching materials, lesson planning, and extracurricular activities necessary for the middle childhood teacher of French, German, or Spanish as a foreign language. Special emphasis on aural-oral teaching techniques and characteristics of the transescent language learner.

F.L. 482 Methods and Materials in Bilingual-Bicultural Education 2 hours
Methods, teaching materials, lesson planning and extracurricular activities necessary for the teacher of bilingual-bicultural education. (May be taken for credit as Education 482.)

F.L. 487-488 Independent Study in Foreign Languages 2 or 4 hours

General Sciences

The division of General Sciences is a grouping of courses only. It is not a department and does not offer a field of concentration. It provides a number of programs, many of which are interdisciplinary in nature, designed principally for non-science majors. Some of these courses, however, such as the history of science, are excellent supplements to the college programs of science majors. In addition, special courses are offered for those who are interested in the teaching of science at the secondary school level.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach General Science in the secondary school: Bio. 100, and four additional Biology hours; Chem. 101, 102. Physics 201, 202. G.S. 201, 480. See the Education Department listings for required Professional Education courses. A second teaching field is required.

G.S. 100 Consumer Chemistry 4 hours
A course emphasizing an understanding of chemical concepts relevant to our everyday lives. At the end of this course, a student should be able to analyze and discuss magazine and newspaper articles dealing with the subjects related to chemistry. *This course is designed for non-science students.* (May be taken for credit as Chemistry 100.)

G.S. 101 Natural Philosophy 4 hours
(See Philosophy 352.)



G.S. 201 Astronomy 4 hours
Non-technical course in descriptive astronomy and cosmology, including such topics as the solar system, stars, galactic systems, telescopes, rocketry, and space travel.

G.S. 202 Physical and Cultural Geography 4 hours
Study of the physical processes tending to alter the climate and surface features of the earth and their consequent effects upon human populations.

G.S. 209 History and Philosophy of Science 4 hours
(See Philosophy 353.)

G.S. 210 Science, Technology, and Society 4 hours
Historical examination of the effects of scientific and technological innovations upon various societies, emphasis being placed upon technology and science of the western world since 1850.

G.S. 211 Energy, Conservation and the Environment 2 hours

This course will examine the energy supply/demand and environmental problems facing our society in the future, as well as the necessity of conservation of present resources. The interrelationships between energy available and economic, political, social and technological systems also will be explored.

G.S. 480 Methods and Materials in Teaching Physical and Life Sciences 4 hours

Aims and methods of teaching the physical and life sciences in the secondary schools. Special attention is given to teaching general laboratory procedures and techniques of teaching. Each of the departments in the physical and life sciences participates in the program. *Prerequisite: 16 hours in one of the physical or life sciences or permission of the instructor.*

G.S. 487-488 Independent Study
2 or 4 hours each

Geography

(See General Science 202 and Social Science 302.)

Graphics

(See Computer Science 400 and Fine and Applied Arts 404, 405, and 406.)



Health Science

Aims

The curriculum in Health Science is interdepartmental, providing the opportunity to earn a Bachelor of Science degree for students who have completed accredited allied health certification programs at other institutions.

In addition to the all-college graduation requirements, students in Health Science may choose among three specializations: Science, Management, and Education. These programs are designed to prepare allied health professionals for graduate or professional school, career changes within allied health fields, or management or educational positions in health professions agencies.

Requirements for a Degree in Health Science

Students admitted to this degree program must have completed an accredited allied health certification in areas such as respiratory therapy, radiology, or a comparable field.

In the *Science* area of specialization, students must complete 44 hours of

selected science courses, plus a Senior Project. These courses will include Chemistry 101, 102, 211, and 212; Physics 201 and 202; Mathematics 281; and 16 hours chosen from Biology 100, 167, 180, 343, 440, and 467.

In the *Management* area of specialization, students must complete 42 hours of selected courses, plus a Senior Project. These courses will include Accounting 211 and 212; Economics 111, 200, 280, 286, 287, and 290; Computer Science 140 or 144; Mathematics 281 and 282; and Communications 302.

In the *Education* area of specialization, students must complete 40 hours of selected courses, plus a Senior Project. These courses will include Education 201, 202, 349, 410, 428, and 470, as well as Education 311, 312, and 476. In addition, students will complete Psychology 100, and Sociology 100 and 362.

For course descriptions, see the listings in the respective departments. Further details of the program may be obtained from the Director of the Health Science Degree Program or the Office of the Dean of the Faculty.

Heuristics

Heuristics 301-302 2 hours each

Investigation and discovery of methodologies of problem-solving within a broad spectrum of academic disciplines and pragmatic pursuits. *Open to juniors and seniors only; permission of instructor required.*



History

Aims

To present the origin and development of institutions and ideas; to point out the great traditions that are molding our thought and action today; and to gain a better perspective of our political, economic, cultural, and social life.

Requirements for Field of Concentration

Twelve hours in European history, including History 301-302, 12 hours of American history, including History 201-202. Four hours in political science, four hours in either African or Asian or Latin American history, History 477, and a Senior Project. Students planning to attend graduate or professional schools should anticipate possible requirements in the areas of foreign language, statistics, accounting, and computer technology.

European and World History

Hist. 100 Western Civilization 4 hours
A survey of the Greek, Roman, Medieval and modern periods of western history. Cultural, diplomatic, economic, social and political topics are considered.

Hist. 297-298 Special Studies in History 2 or 4 hours
Designed to permit students to study with various faculty members in the department or with visiting instructors or other competent foreign visitors.

Hist. 301-302 Modern European History 4 hours each
Survey of European civilization from the Renaissance to the present. Second semester begins with 1815.

Hist. 327 British History 4 hours
A survey of British society to the Elizabethan period followed by a more detailed study of the Elizabethan period through World War II. Topics such as the nature of the 18th century politics, the Industrial Revolution, liberal and Victorian England, the impact of the World Wars on British society, and the "Irish Question" will be examined.

Hist. 351 Ancient Near Eastern Civilization 4 hours
(See Religious Studies 351.)

Hist. 353 Hellenistic Civilization 4 hours
(See Religious Studies 353.)

Hist. 381 History of the Middle East and North Africa 2 hours
Historical survey of the rise of the Islamic empires from the time of the Prophet, including the Caliphates, the classical period of Islam, and the Ottoman rule to the end of World War II.

Hist. 382 Cultural Life in the Middle East and North Africa 4 hours
Study of the cultural developments and impact of Islamic civilization, including religion, art, literature, philosophy, and law. (May be taken for credit as Religious Studies 382.)

Hist. 428 The Middle Ages 4 hours
Study of the decline of ancient civilization, the Byzantine and Islamic cultures, and especially the development of Western Europe to the 14th century.

Hist. 468 Revolution and Reaction in Modern History 4 hours
Comparative study of the English, American, French, and Russian revolutions. Emphasis is placed on the origins and characteristics of revolutions, the roles of revolutionary leaders, and the relationship of the 17th, 18th, and 19th century revolutions to contemporary struggles in the third world. (May be taken for credit as Politics and Public Policy 468.)

American History

Hist. 201-202 U.S. History 4 hours each
Political, economic, and social growth of America. First semester covers the period of exploration to 1865; second semester from 1865 to the present.

Hist. 225 West Virginia History, Government, and Geography 2 hours
History of the western section of Virginia to the Civil War and the history and government of West Virginia to the present. The physical, political, and social geography of the state is included. Field trips to various sections of the state are included as part of the course.

Hist. 275 Connections 2 hours
A television/seminar program that explores the relationships between technologies of the past and present. The flexible course design will appeal to students of varying backgrounds in science and technology.

Hist. 288 The American Political Novel 2 hours
Political life in the United States at the municipal, state, and federal level as reflected in a number of political novels since 1932. The course examines *Grapes of Wrath*, John Steinbeck; *It Can't Happen Here*, Sinclair Lewis; *All the King's Men*, Robert Penn Warren; *The Last Hurrah*, Edwin O'Connor; and *Advise and Consent*, Alan Drury, plus an additional book selected for each student. (May be taken for credit as Politics and Public Policy 288.)

Hist. 295 Local Architectural History 4 hours
Students will study and document the interrelationship between the architectural history of a clearly defined local region and the cultural, social and economic forces which shaped the area. Although most of the work will be done in the field, lectures, readings and surveys will be included. Each student will prepare a photographic and written analytic report of an important historical structure or area. *Prerequisite: Permission of the Instructor.*

Hist. 341 Development of the American Nation 4 hours
History of the United States from 1816 to 1861. Considers growth of American nationalism and sectionalism following the War of 1812; the rise of Jacksonian Democracy, territorial expansion, and the coming of the Civil War.

Hist. 342 Age of Big Business 4 hours
Political, social, and economic history of the U.S. from 1865 to 1914. Emphasis is placed on the growth of industrialism during this period and the resulting attempts at social reform.

Hist. 423 Contemporary U.S.

History 4 hours

The history of the United States since 1945. The course will include a brief review of the Progressive Era, the 1920s and the New Deal. Films, records, contemporary magazines, scholarly journals and newspapers will be used in addition to the text books.

Hist. 426 Latin America 4 hours

Study of the geography, politics, social composition, economic structure, history and problems of Latin America.

Hist. 465 Constitutional Law 4 hours
(See Politics and Public Policy 465.)

Hist. 477 Historical Writings and Methods 2 hours

Study of the major works of the ancient, medieval, and modern European and American historians with emphasis on the various schools and methods of interpretation. The student also receives an introduction to the nature and methods of history as an intellectual discipline. Emphasis is placed on the technique of historical research, and the art of expression and critical analysis.

Hist. 487-488 Independent Study 2 or 4 hours each

Hist. 490 Senior Project 2-6 hours
Begins first semester of the senior year.



Interdisciplinary Studies

Aims

The interdisciplinary studies program recognizes that some students are more likely to achieve the goals of an "integrated education" and a "self-examined life," as set forth in the Bethany Plan, by designing their own cross-disciplinary field of concentration. The aim of the program is to facilitate such study by providing the machinery needed for its implementation and evaluation; by aiding the student in the study of interdisciplinary methods and problems; by critically evaluating the student's grasp of methods and materials of various disciplines; and by requiring the student to integrate his or her knowledge of materials and methods, derived from various disciplines, around a single problem or idea.

Requirements for Field of Concentration

The interdisciplinary studies program is designed to facilitate the faculty-sponsored or student-initiated program of study that cuts across departmental lines. The initiator of the program is responsible for establishing the content of the special curriculum, for stating the goals of the special curriculum, and for justifying the creation of a special

curriculum. The Committee on Interdisciplinary Study approves or rejects the curriculum proposal. The program must include at least 24 hours (excluding the Senior Project) in an approved core curriculum. The special curriculum may not exceed 72 hours. No more than 48 hours in any one department will be counted toward graduation. All work is supervised by the director of interdisciplinary studies. The director serves as the student's academic advisor throughout the program of study.

Admission to the Interdisciplinary Studies Program

It is recommended that all proposals for admission to the program be submitted to the director on or before the last day of the last semester of the student's sophomore year. Students who apply after this date may find that it will take them an extra summer or an extra semester to meet all requirements for graduation.

Student proposals must follow the outline provided by the Committee on Interdisciplinary Study and must be accompanied by proper supporting documents.

All proposals should be prepared in consultation with the director of interdisciplinary studies.

Senior Year

Senior Comprehensive Examination: Students must have completed at least 24 hours of study in their special curriculum (including all courses designed as required in the original proposal) before they are eligible to take the examination.

The Senior Comprehensive Examination will be designed to measure the student's grasp of methods and materials basic to the disciplines emphasized in the core curriculum; to test the student's capacity for integrating materials and methods from the various disciplines; and to allow the student to evaluate the success of the special curriculum in light of his or her stated goals.

Senior Project: Students who wish to do 4-8 hour Senior Projects must have their programs approved by the director on or before the last day of the last semester of their junior year.

I.S. 100 The Origins of the Western World 4 hours
(See Page 44.)

I.S. 201 World Hunger: The Quest for Survival 4 hours

An exploration of the problems of world food resources, production and distribution. Special emphasis will be placed on inequalities between the have's and have-not's, the effects of malnourishment on human behavior and on social and political conditions, and alternative technological and political solutions to the problem. (*Not open to Freshmen.*)

I.S. 202 Energy: The World Crisis 4 hours

An analysis of the current scarcity of energy resources required for the modern industrial world: its historical and geographical context, its psychological, social and political ramifications, and its possible consequences. Alternative technological solutions will be examined and evaluated. (*Not open to Freshmen.*)

I.S. 203 International Terrorism 4 hours
This course examines the origins, nature, cost, containment, and prevention of terrorism, violence, and revolution in today's world, focusing in particular on the reasons why many nations and peoples outside the ruling classes of the major developed nations turn to violence. (*Not open to Freshmen.*)

I.S. 204 Sex Roles: A Global Perspective
4 hours

A study of the changing roles of women and men in the world. Special attention is given to the traditional values of major human cultures and the repercussions of changing sex roles on those values and on society's institutions. (*Not open to Freshmen.*)

I.S. 210 The Origins of Life 4 hours

This interdisciplinary course focuses on the question "What is the probability that we, as humans, will encounter other life forms in the universe?". The main focus will concern the physical conditions necessary for the origin of life forms in the universe, particularly with respect to the origin of life on Earth. The history of ideas and concepts related to this question and a review of current theories and experimental work in this area will be covered. The economic, philosophical and attitudinal impact of this question on today's society will also be explored. This course is designed for those majoring in the Social Sciences and the Humanities, although it may be taken by those majoring in the Sciences. Appropriate laboratory experiences and demonstrations will be an integral part of the course. (*Not open to Freshmen.*)

I.S. 487-488 Independent Study
2 or 4 hours

I.S. 490 Senior Project 4-8 hours



Library

Aims

The T. W. Phillips Memorial Library provides a variety of educational services to the Bethany College community through an experienced and well-trained staff and a wealth of learning resources. The librarians view their purpose in the following ways: to provide materials which support the Bethany curriculum and the individual

projects of students, to encourage students to ask questions and to assist them in their search for answers through the teaching of bibliographic skills, to help students develop a love of books and an awareness of the vast amount of information available throughout the world, and to develop an understanding of the importance to individuals and to societies of having access to information.

Mathematics

Aims

To provide the general student with a knowledge of the foundations of mathematics; to give the prospective teacher an understanding and appreciation of the fundamental ideas of elementary mathematics; to provide a tool for the technical student; and to give the prospective graduate student a foundation for later study and research.

Requirements for Field of Concentration

The student is required to take the following 24 hours in the department: Math. 201, Calculus I; Math. 202, Calculus II; Math. 203, Calculus III; Math. 354, Linear Algebra; Math. 400, Abstract Algebra; Math. 401, Advanced Calculus.

The student also must complete a Senior Project. In addition, each student must complete one of the following tracks:

Mathematics: CS 142, 143, or 201; twelve hours from the following: Math. 326, 341, 344, 390, 383, 384.

Mathematics-Economics: Math 231, 281, 282; Acct. 211; Eco 200, 301, 302; CS 144 or 145.

Mathematics-Physics: Math 341; Physics 201, 202 (251 or 261), 300; CS 142 or 143.

Mathematics-Computer Science: CS 142 or 143; 201, 202, 290, 390; Math 341.

Mathematics-Education: Math 103, 201, 202, 203, 281, 326, 354, 400, 401, 480, and CS 140 or 201.

Only students who have completed the Mathematics-Education track will be recommended for state certification to teach mathematics in secondary school. See the Education Department listings for required Professional Education courses. A second teaching field is required.

Math. 103 Elementary Algebra 4 hours
Designed to prepare the student to take Calculus I. Sets and operations on sets, number systems, solutions to equations, inequalities, functions and graphing, conic sections, synthetic division and the remainder theorem, exponential and logarithm functions, computation with common logarithms. *May not be taken if credit has been earned for Math 201.*

Math. 104 Trigonometry 2 hours
Radian measure, trigonometric functions and their graphs, fundamental identities, conditional trigonometric equations, inverse trigonometric functions, vectors, complex numbers, trigonometric form of complex numbers. DeMoivre's Theorem. *The material covered in this course is necessary background for Math. 202: Calculus II.*

Math. 141 Mathematics for the Liberal Arts Student 4 hours
Introduces the non-science major to the spirit and flavor of mathematics. Stresses fundamental concepts with the aim of clarifying the importance of mathematics in relation to other branches of knowledge. Topics that may be covered include sets, logic, the number concept, history of mathematics, the nature and use of geometry, computers, computer programming, and logical puzzles.

Math. 152 Finite Mathematics 4 hours
Intended primarily for students of the biological or social sciences. It is also recommended for non-science majors desiring an acquaintance with mathematics. It is not a precalculus course. Concepts studied include logic, set theory, matrices, probability theory, linear programming, and game theory.

Math. 201 Calculus I 4 hours
Real number system, equations of a line, study of the circle and parabola, functions, limits, and continuity. Techniques of differentiation and integration applied to maximum and minimum problems and to related rates. *Prerequisite: 3½ years of high school math or Math. 103 or permission of the instructor.*

Math. 202 Calculus II 4 hours
Area between two curves, volumes of revolution, moments, centroids, hydrostatic pressure, and work. Integration and differentiation of transcendental functions. Methods of integration including integration by parts, partial fractions, and trigonometric substitution. Polar coordinates and graphs, area, and angles of intersection in polar coordinates. *Prerequisite: Math. 201 or advanced placement.*

Math. 203 Calculus III 4 hours
Intermediate calculus with emphasis on vector methods and functions of several variables. Scalar and vector products. Partial differentiation and applications, directional derivative and gradient. Multiple integrals with physical applications. Expansion of functions. L'Hospital rule, sequences, and series. *Prerequisite: Math. 202.*

Math. 225-226 Mathematics for Elementary Teachers 2 hours each

The first course is a study of the fundamental principles and concepts of arithmetic. The second is a study of intuitive geometry.

Math. 231 Operations Research 2 hours

This course deals with applications of matrix algebra to business and economics, including problems involving cost minimization and profit maximization. (The necessary matrix algebra will be developed in the course.)

Primarily designed for students who intend to pursue a career in business. Prerequisite: Math 103 or equivalent.

Math. 250 Mathematics for Early and Middle Childhood 4 hours

A course designed in content and teaching style for early and middle childhood pre-service teachers. The course will emphasize active student participation and a field placement component which will permit the students to develop materials and evaluation instruments as well as practice the teaching of mathematics concepts including: the structure of the number systems, real number properties and the computation derived from them, problem solving strategies, and geometry and measurement. *Required for Middle Childhood. Enrollment by permission of the instructor.*

Math. 281 Statistical Methods 4 hours
Introductory statistical analysis including frequency distribution and graphic presentation of data, measures of central tendency, relative positions in a distribution, variability, the normal curve and its applications, correlation and regression, probability and statistical inference, testing differences between means, introduction to analysis of variance. (Not open to students in the general program.)

Math. 282 Statistical Methods II 2 hours
Testing goodness of fit, contingency tables, regression and correlation analysis, analysis of variance, non-parametric methods.

Math. 326 Introduction to Modern Geometry 4 hours

Euclidean and non-Euclidean geometries; an introduction to synthetic projective geometry; the concept of limit and infinity; geometrical constructions, recent developments and theorems. *Prerequisites: Math. 201, 202.*



Math. 341 Differential Equations

4 hours
Methods of solution of ordinary and partial differential equations and applications to the physical sciences. *Prerequisite: Math. 202.*

Math. 344 Complex Variables 2 hours
Complex numbers, elementary functions, analytic functions, contour integration, Taylor and Laurent series, conformal mapping, boundary value problems, Laplacian equations. *Prerequisite: Math. 203.*

Math. 354 Linear Algebra 4 hours
Geometric vectors, matrices and linear equations, real vector spaces, linear transformations and matrices, and inner product spaces.

Math. 383 Probability & Statistics I 4 hours

Introduction to probability, basic distribution theory, limit theorems, mathematical expectation, probability densities, random variables, sampling distributions, point and interval estimation, tests of hypotheses, regression and correlation, analysis of variance. *Prerequisite: Math. 202 or permission of the instructor.*

Math. 384 Probability & Statistics II 2 hours

In this course, the student will apply the concepts of probability to statistical procedures such as sampling estimations, tests of hypothesis, regression theory, and Bayesian methods. *Prerequisite: Math. 383.*

Math. 390 Numerical Analysis 4 hours
Numerical methods in evaluating integrals and differential equations. Techniques in finding the roots of polynomials and solving systems of linear equations and matrix manipulation. *Prerequisites: CS 142, 143 or 201 and Math. 201, 202. (May be taken for credit as Computer Science 390.)*

Math. 400 Modern Abstract Algebra 4 hours

Groups, rings, integral domains, fields, and vector spaces.

Math. 401 Advanced Calculus 4 hours
The Jacobian, Lagrange multipliers, limits and continuity, completeness of the Real numbers, sequences, series, Fourier series and orthogonal functions, partial differential equations, Implicit Function Theorem. *Prerequisite: Math. 203.*

Math. 478 Senior Seminar 2 hours

An examination of the historical development and cultural significance of mathematics. A study of modern trends in mathematical thought and application as revealed in the literature. An analysis of career opportunities in mathematics.

Math. 480 Methods and Materials in Teaching Mathematics 2 hours

Approved methods in teaching mathematics at the secondary level; class period activities of the teacher; procedures and devices in teaching; organization of materials, testing, aims, and modern trends. (May be taken for credit as Education 480.)

Math. 487-488 Independent Study 2 or 4 hours

Math. 490 Senior Project 2-8 hours

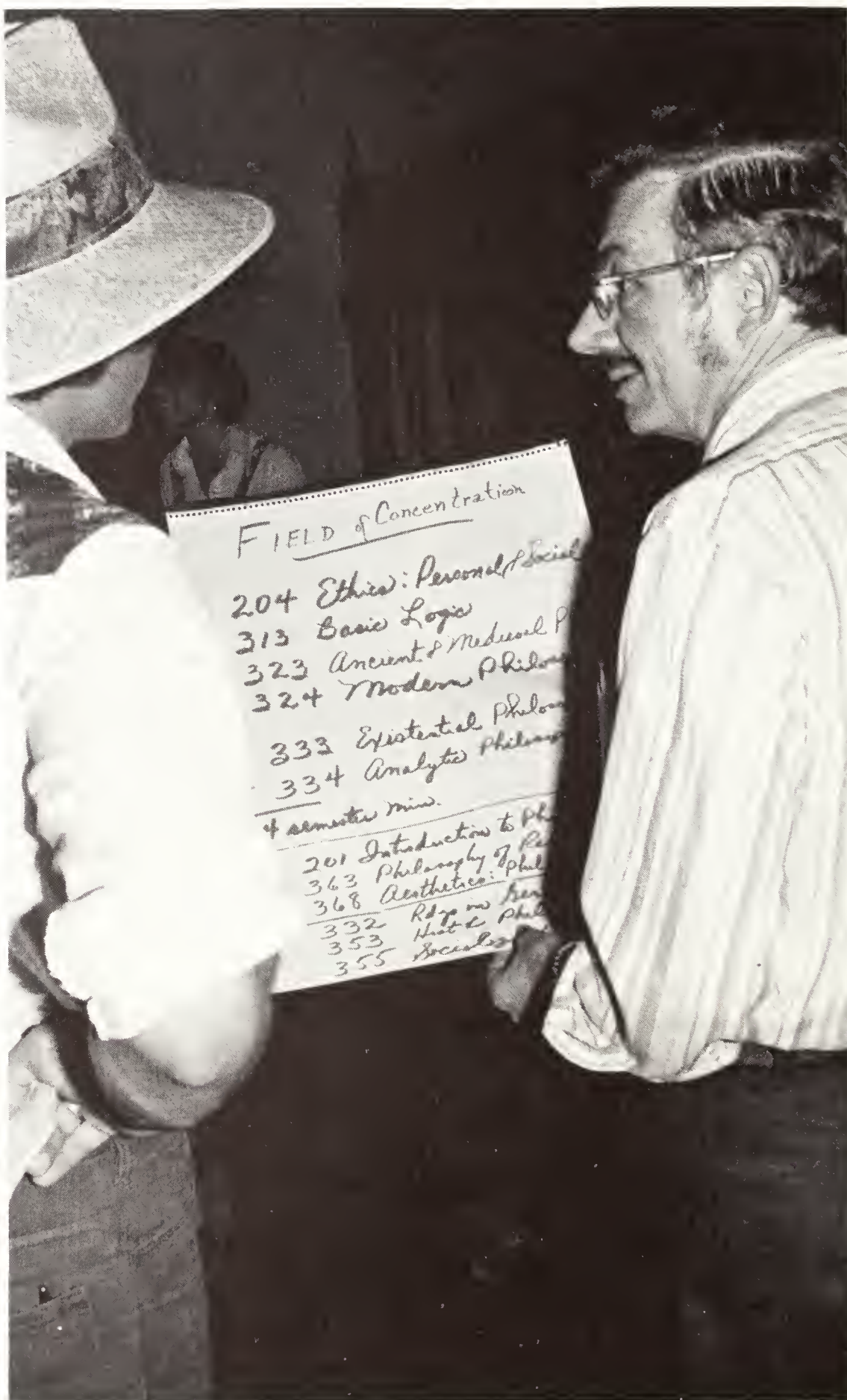
Philosophy

Aims

To assist the student in discovering and developing sound bases for interpreting self and society through a careful examination of his or her beliefs, actions, and claims to knowledge; to assist the student in becoming aware of the nature and status of philosophical problems, commitments, ideologies, and models that serve as the foundation of human life; and to provide the student who expects to pursue graduate studies in philosophy with a sound basis in the major areas of the field.

Requirements for Field of Concentration

Concentration in philosophy may hold promise for several students as one way to achieve a liberal education. For others, philosophy may be an important related field; or it may serve as a good foundation for those planning for graduate work in another field as well as for those who are professionally interested in philosophy.



Concentration in philosophy requires satisfactory completion of a minimum of 24 hours, including Philosophy 123, 124, 323, 324, 325, plus a Senior Project, and Senior Comprehensive Examination. The Senior Project is received and evaluated in the final semester of the student's academic program.

The student who is considering graduate work should be aware that many good graduate programs in philosophy require a reading knowledge of French and German.

Phil. 100 Introduction to Philosophy 4 hours

Intended primarily to involve students in an introductory exploration into the range of problems with which philosophers wrestle. "Living issues" confront us in such vital areas as: the nature of self, man, mind, values, knowing, freedom, and of philosophy, philosophic outlooks, and religious traditions.

Phil. 123 Basic Logic 4 hours

Students are assisted in developing the ability to recognize the differences between emotional intensity and valid argument, between verbal disputes and conclusions that follow (logically) from premises. Recognition of the bases of these differences and development of the very practical abilities to recognize, construct, and analyze various forms of argument and to detect logical errors (fallacies) are important objectives of the course.

Phil. 124 Ethics: Personal and Social 4 hours

Examination of different personal and social foundations upon which ethics or morals can be (and have been) built – such as pleasure, happiness, feeling, reason, obligation, usefulness, and relativism; significant moral problems in several areas of life and work; and basic criteria for moral decision-making.

Phil. 250-259 Special Topics in Philosophy 2 or 4 hours

Phil. 252 Philosophy of Mysticism 4 hours

Examination of what is involved in the experience and claims of several mystical groups or representatives, from ancient to contemporary times. Emphasis will focus on trying to understand the basic claims that mystics make, assessing the kinds of certainty, truth and insight claimed, and exploring the place of "the mystical" in human experience.

Phil. 323 Ancient and Medieval Philosophy 4 hours

Begins with the seventh century B.C. Greek mythic interpretations and moves through early Nature Philosophies, Scepticism, Greek Humanism, the Golden Age, the Roman Period, and the relationship of religion and philosophy in the Medieval Period.

Phil. 324 Modern Philosophy: From the Renaissance Through the 19th Century 4 hours

Begins with the New Learning and moves through the rise of "the scientific spirit," the development of British Empiricism and Continental Rationalism, Kant's "revolutionary" impact on philosophy, and the major thought forms of the 19th Century.

Phil. 325 Twentieth Century Philosophies 4 hours

A survey of the dominant philosophic forms from Bergson, Dewey and Whitehead through the rise of realism, logical analysis, phenomenology-existentialism and language studies.

Phil. 350-359 Advanced Topics in Philosophy 2 or 4 hours

Phil. 352 Natural Philosophy 4 hours

Examination of the physical universe and man's place in it through an emphasis upon the ways in which the physical sciences have altered and are now altering man's understanding of the universe. (May be taken for credit as General Sciences 101.)

Phil. 353 History and Philosophy of Science 4 hours

Study of some of the major ideas conceived by western man in attempting to comprehend and describe the natural world. *Prerequisite: one year of college level science or permission of the instructor.* (May be taken for credit as General Sciences 209.)

Phil. 355 Philosophy of Religion 2 or 4 hours

Examination of the major aspects of religion from a philosophic perspective. Study will include: the religious experience, the meaning and significance of faith, belief and criteria, knowledge, proof, evidence and certainty, concept of deity, scope and impact of religion in human life.

Phil. 358 Aesthetics, The Arts, and Philosophy 2 or 4 hours

Examination of the nature of aesthetic experience and its relation to other kinds of experience, as well as its place in art production, appreciation and creativity; the notion of "a work of art"; language used in description, interpretation, and evaluation of art; and different interpretations of aesthetics. Opportunities are provided for giving special attention to particular art areas as well as to "the Arts."

Phil. 477-478 Senior Seminar 2 hours each

This seminar seldom consists of a general review of all areas of philosophy; the topic or particular area of study is chosen as a result of student and faculty conferences. Student ability, interest, and need are important factors. *Conferences with and permission of the head of the department are required before enrollment.*

Phil. 487-488 Independent Study 2 or 4 hours each

Phil. 490 Senior Project 2-8 hours



Physical Education

Aims

To enhance the health of the student; to provide opportunities for students to participate and develop proficiency in sport activities; and to prepare students for professional careers in physical education, recreation, athletic coaching in educational, agency and/or municipal institutions, and sports communication.

Requirements for Field of Concentration – Physical Education

A minimum of 44 hours in the department, which must include P.E. 101, 110, 226, 243, 244, 310, 426, 427, 479, 480, 481, 486, and 490 or their equivalents. Additionally, all students must take Biology 100 and 167, as well as Education 201 and 202.

Optional Program Opportunities:

1. To be recommended for state certification, K-12 students must complete the requirements for the field of concentration and 230, 231. Electives chosen should include four hours selected from P.E. 309, 340, 355 and four hours elective clinics. See the Education Department listings for the required Professional Education courses. A second teaching field is required.



2. To be recommended for state certification 7-9 or 7-12, a minimum of 34 hours in Physical Education is required. This must include the following: P.E. 101, 110, 226, 230, 231, 243, 244, 426, 427, 479, 480; four hours selected from P.E. 309, 340, 355 and four hours elective clinics. Students also must complete Bio. 100 and 167. See the Education Department listings for required Professional Education courses. A second field is required.

3. For non-physical education majors, an emphasis in coaching is available. Eighteen hours are required which must include Biology 167, P.E. 355, 340, 485, and two hours selected from P.E. 300-305. Electives include P.E. 243, 244, 426 or 427.

Requirements for Field of Concentration — Leisure Studies

A. Leisure Management — A minimum of 38 hours in the department which must include 110, 120, 167, 226, 243, 244, 280, 290, 385, 386, 426, 427, 476, 490 and two hours of performance. Additionally, all students must take Accounting 211; Biology 100; Economics 200, 280, 290, 312.

B. Leisure Services — A minimum of 44 hours in the department which must include 110, 120, 167, 226, 243, 244, 280, 290, 309, 385, 386, 426, 427, 476, 480, 490, and two hours of performance. Additionally, all students must take Accounting 211; Biology 100; Economics 200, 280; Fine and Applied Arts 340; Fine and Applied Arts 120, and two hours of Fine and Applied Arts in Theatre.

The following courses are recommended: Soc. 361, 362; Pol. 227.

A department-approved internship in leisure field is required.

P.E. 100-165 Physical Education Performance Courses

Skills in performances, knowledge of strategies, rules, equipment and methods, and participation in sport forms. For non-majors, a maximum of four hours may be credited toward graduation requirements. Specific requirements of majors, six hours (excluding P.E. 150-163), but not to exceed 10 hours.

Courses Available

- P.E. 101 Gymnastics/Dance
- P.E. 110 Aquatics (Advanced Life Saving)
- P.E. 111 Swimming (Basic - Advanced)
- P.E. 120 Folk Dance
- P.E. 121 Horseback Riding
- P.E. 130 Golf - Handball - Paddle Ball
- P.E. 131 Orienteering
- P.E. 132 Archery - Table Tennis
- P.E. 134 Body Mechanics
- P.E. 135 Tennis - Badminton
- P.E. 137 Modern Dance - Rhythms
- P.E. 139 Physical Fitness
- P.E. 140 Field Hockey - Softball
- P.E. 141 Aerobics
- P.E. 142 Track & Field - Wrestling
- P.E. 144 Soccer - Volleyball
- P.E. 146 Football - Wrestling
- P.E. 150 Varsity Baseball
- P.E. 151 Varsity Basketball (M)
- P.E. 152 Varsity Basketball (W)
- P.E. 153 Varsity Cross Country
- P.E. 154 Varsity Field Hockey
- P.E. 155 Varsity Football
- P.E. 156 Varsity Golf
- P.E. 157 Varsity Soccer
- P.E. 158 Varsity Swimming
- P.E. 159 Varsity Tennis (M)
- P.E. 160 Varsity Tennis (W)
- P.E. 161 Varsity Track
- P.E. 162 Varsity Volleyball
- P.E. 163 Varsity Softball

Recommended Sequence of Courses for Physical Education Majors

First Semester	Credit	Second Semester	Credit
Freshman			
Bio. 100 Modern Concepts in Life Science	4	Bio. 167 Introduction to Mammalian Anatomy and Physiology	4
		Psych. 100 General Psychology	4
Sophomore			
P. E. 226 First Aid	2	P. E. 244 Philosophical-Historical Perspective*	4
Ed. 201 Human Development I	4	Ed. 202 Human Development	4
P. E. 243 Socio-Psychological Perspective*	4	Ed. 242 Principles and Curriculum in the Public Schools	2
P. E. 230 Lab Analysis – Team	2	P. E. 231 Lab Analysis – Individual	2
Junior			
P. E. 479 Teaching Physical Education I	4	Ed. 348 Professional Practicum	4
P. E. 310 Adapted Physical Education	2	P. E. 426 Kinesiology	2
P. E. 110 Aquatics	1	P. E. 427 Physiology	2
P. E. – Clinic (300-308)	2	P. E. 480 Teaching Physical Education II	4
		P. E. 481 Elementary School Physical Education	2
		P. E. 101 Gymnastics	1
Senior			
Sp. Ed. 410 Tests and Measurements	2	P. E. 486 Issues in Sport	2
Ed. 401 History and Philosophy of Education	2	P. E. 490 Senior Project	2-8
Ed. 428 Principles and Techniques of Secondary Education	4	P. E. – Elective	2-4
Ed. 470 Observation and Directed Teaching	8	P. E. – Clinic (300-308)	2

*P. E. 243-244 may be taken in the freshman year but Soc. 100, Psych. 100, and/or Phil. 100 are recommended as prerequisites.



P.E. 167 Introduction to Mammalian Anatomy and Physiology 4 hours
(See Biology 167.)

P.E. 200-225 Physical Education Performance Courses 1 hour each
Advanced skills in performance, advanced knowledge of rules, equipment and methods; participation in sport forums. Open to non-majors. *Prerequisite: successful completion of 100 level performance course.*

Courses Available

P.E. 201 Gymnastics
P.E. 210 Aquatics WSI
P.E. 222 Archery - Table Tennis
P.E. 224 Tennis - Badminton

P.E. 226 First Aid as Related to the Principles of Biology 2 hours
(See Biology 105.)

P.E. 227 Personal and Community Health 4 hours
Fundamental knowledge of personal and community health matters pertaining to the social group: communicable diseases, vital statistics, and legal and social regulations.

P.E. 230 Lab Analysis – Team 2 hours
Emphasis on skill development and analysis and cognitive acquisition of rules, equipment, strategies and methods. Sports covered include soccer, volleyball, field hockey, football, basketball, softball.

P.E. 231 Lab Analysis – Individual 2 hours
Emphasis on skill development and analysis and cognitive acquisition of rules, equipment, strategies and methods. Sports covered include archery, badminton, dance, golf, tennis, track and field.

P.E. 243 Socio-Psychological Perspective 4 hours
Consideration of small sport groups as micro-social systems; application of group dynamics theory and small group research to the study of sport groups; investigation of the influence of group member characteristics, environmental factors, interpersonal relations, and group structural characteristics on individual member adjustment and group effectiveness. Designed to investigate those aspects of psychology which influence the performance and the participant in sport. Additional factors such as motives, arousal, aggression, and other socio-psychological variables will be covered.

P.E. 244 Philosophical-Historical Perspective 4 hours
Philosophical inquiry into physical education. Consideration given to general philosophical interpretation of the nature and purpose of physical education. Review of the historical and philosophical changes in American education with emphasis on the developing roles of professional physical education.

P.E. 280 Leisure in Socio-Cultural Patterns 4 hours
Leisure philosophies in the history of man; leisure values reflected in the culture; factors affecting leisure such as demography, technology, and population; social meaning and scope of leisure.

P.E. 290 Leisure and Human Behavior 4 hours
Motivation and leisure behavior; physiological and activity outcomes; man as a social organism; emergence of leadership in leisure pursuits.

P.E. 300-308 Clinics 2 hours each
The major purpose of the sport clinic is to prepare a student to teach the sport or activity(ies) within any phase of the total school environment. Emphasis should be placed on theory (e.g. football theory) and teaching methodology(ies), both skill and theory. Skill advancement should not be an objective of a sport clinic but may be an outcome.

Courses:

P.E. 300	Basketball-Tennis-Golf	2
P.E. 301	Aquatics-Baseball	2
P.E. 302	Track & Field-Soccer	2
P.E. 303	Football-Wrestling	2
P.E. 304	Field Hockey-Volleyball	2
P.E. 305	Games and Sports for Children	2
P.E. 306	Gymnastics	2

P.E. 309 Intramural Sports 2 hours
Organization, administration, and objectives of the intramural athletic programs.

P.E. 310 Adapted Physical Education 2 hours
Variations of-the normal types of the human organism at different age levels; therapeutic measures, especially those which correct mechanical defects.

P.E. 340 Prevention and Care of Injuries 2 hours
Common hazards of play and athletics. Preventive measures and treatment of injuries. Red Cross First Aid Certificate may be earned by those who pass the examination. Laboratory fee: \$30.

P.E. 341 Advanced Athletic Training 4 hours
Major emphasis is placed on those skills needed by personnel involved in the field of sports medicine. Orthopedic evaluations of injuries, treatment of crisis situations, and study of conditioning and rehabilitation programs will be covered. *Prerequisites: P.E. 340, 426, 427.* Laboratory fee: \$30

P.E. 350 Sports Information 2 hours
Examination of the varied duties and functions of the sports information director. Special emphasis will be on writing general press releases, fact sheets, and special features; special team and individual promotions, and proper press box procedures, statistics and reporting results. Some attention will be given to photography and use of media.

P.E. 355 Coaching Sport 2 hours
Basic philosophy and principles of athletics as integral parts of physical education and general education. State, local and national regulations and recommendations related to athletics; legal considerations; function and organization of leagues and athletic associations; personal standards and responsibilities of the coach as a leader; public relations; general safety procedures; general principles of budgets, records, purchasing and facilities.

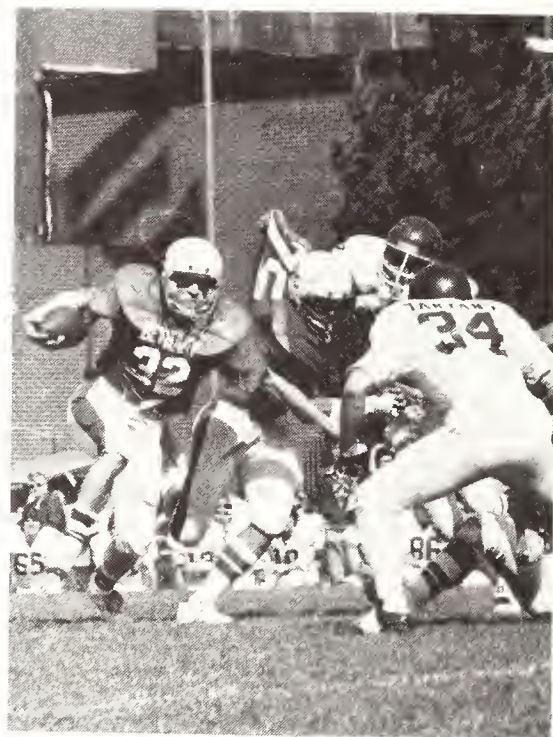
P.E. 385 Fundamentals of Camping
2 hours

History and philosophy of camping; organization of established camping principles and applied techniques of camping; supervision of counselorship in established camps.

P.E. 386 Therapeutic Use of Leisure
2 hours

Leisure activities for the maintenance of healthy levels of fitness within limitations of disability; physical and social skills directed toward rehabilitation; meeting needs of disabled individuals based upon abilities, interests, limitations and psycho-social characteristics.

P.E. 426 Kinesiology 2 hours
Anatomy and mechanics applied in the study of the human body during physical exercise; with special emphasis on the analysis of motion in specific sports skills and exercise patterns. *Prerequisite: Biology 167.*



P.E. 427 Physiology of Muscular Activity
2 hours

Anatomy and physiology applied in the study of the human body during physical exercise; with special emphasis on the application of physiological variables in specific sports skills and exercise patterns. *Prerequisite: Bio. 167.*

P.E. 470 Contemporary Problems in Health 2 hours

Study of current health problems, including mental health, nutrition, accidents, physical fitness, and drug education.

P.E. 471 Planned Family and Sex Education 2 hours

Methods and techniques of teaching sex education in the educational system, including such topics as dating, marriage adjustments, pregnancy and the reproductive systems, family planning and fertility control, and divorce.

P.E. 476 Management and Organization of Leisure Services 2 hours

Treatment of management principles and practices and personnel administration; development of management skills; overview of personality and motivation theories serves as a basic focus. Analysis of leisure organizations, including theoretical concepts of organizational planning, goal-setting, executing, and evaluating. Mode of motivation and the impact of individual and group structure.

P.E. 479-480 Teaching Physical Education I & II 4 hours each

Analysis of current methods, materials and techniques pertinent to teaching and administering physical education and athletics. Development of an understanding of the formative and summative evaluation process in the cognitive, affective and psychomotor domains of physical education. Emphasis is given to data-collection techniques (measurement), data-manipulation (statistics), data evaluation and data interpretation in view of teaching. Integration of administrative processes and techniques with teaching and evaluation. Must be taken in sequence.

P.E. 481 Elementary School Physical Education 2 hours

Teaching physical education at the elementary level. A study of this age group's physical, motor, social, and emotional development, plus activities contributing to proper physical development.

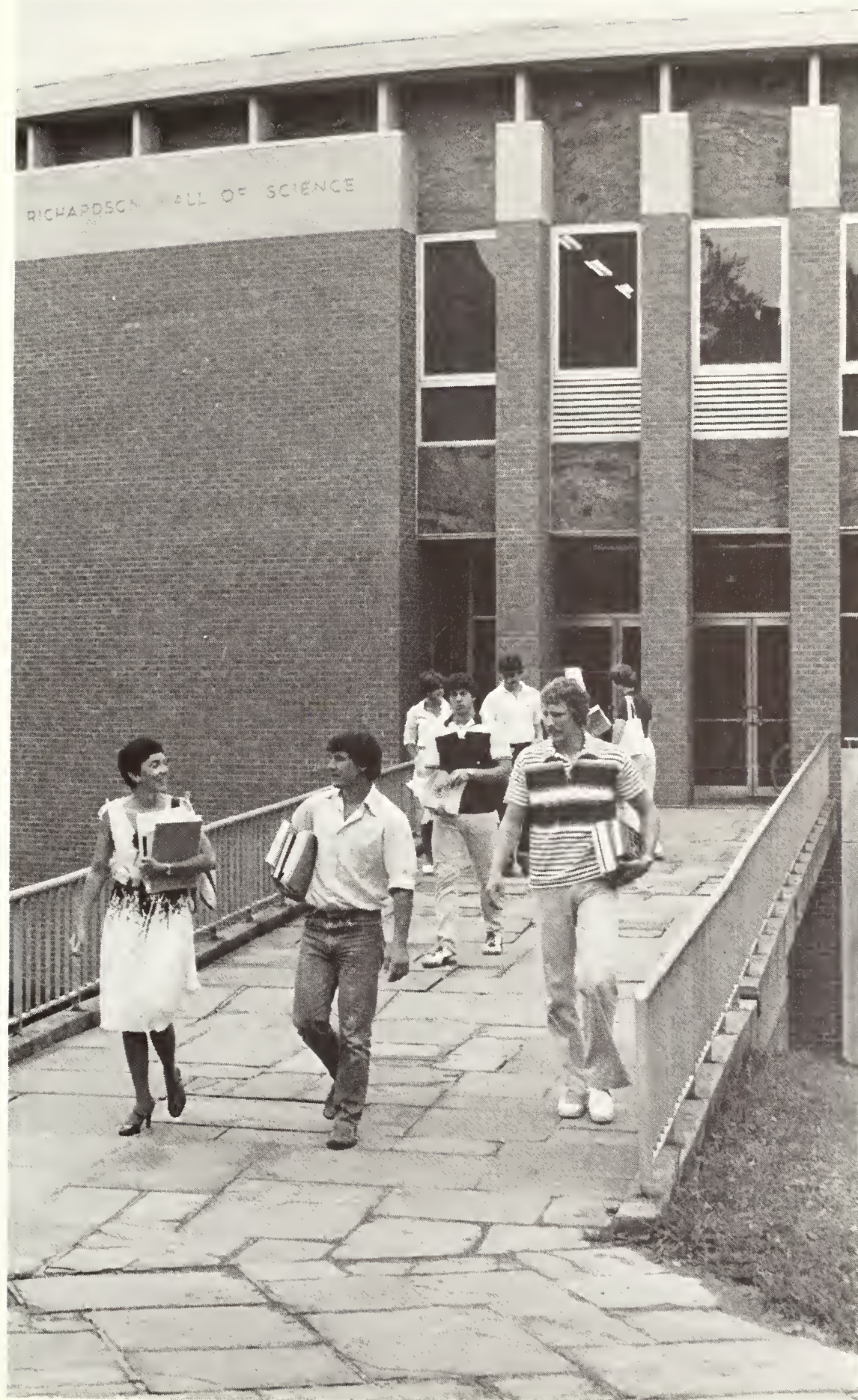
P.E. 485 Participation in Coaching
2 hours

Required participation and scheduled seminars for those with no coaching experience. Student is assigned for a sport season to assist in coaching at the interscholastic or intercollegiate level. Assignment of students shall be dependent on master of the sport. *Prerequisite: Permission of the department head.*

P.E. 486 Issues in Sport 2 hours
Analysis of the origins, effects, and implications of current developments in theoretical aspects of physical education, sport, and leisure. Description and explanation of the nature and purpose of sport activities in relation to their conduct in an education, leisure and/or athletic setting. Includes discussion, directed reading and individual study related to the impact of issues, concepts and trends in the areas of education, leisure or athletics.

P.E. 487-488 Independent Study
2 or 4 hours each

P.E. 490 Senior Project 2-8 hours



Physics

Aims

To introduce students to the current body of knowledge expressing the physicist's concepts of the universe and its physical laws; to provide courses serving the needs of liberal arts students who are concentrating in physics or are interested in the physical and life sciences, medicine, optometry, therapy, engineering, or teaching. Students may choose from a variety of courses to satisfy a distribution requirement, to attain enough competence for a future career in a related field, or to attain sufficient breadth and depth to pursue an advanced degree in physics.

Requirements for Field of Concentration

A minimum of 36 hours in the department, including Physics 201, 202, either 221 or 222, 251, 261, 300, 303, 314, 316, 318 and either 305 or 306, plus a Senior Project. Those students expecting to do graduate work are urged to take both 221 and 222 and both 305 and 306. Mathematics and chemistry are strongly recommended as related fields.

A combined plan with Case Western Reserve University, Columbia University, a dual-degree program with Georgia Institute of Technology, and a Three-Two Plan with Washington University are available to students interested in various engineering or industrial management degrees. Special programs are offered in cooperation with the Education Department for students interested in meeting the

demand for teachers of physics, particularly in upper middle and secondary schools. The required courses in the Physics Department are the following 28 hours: Physics 201, 202, 221, 251, 261, 300, 318, and either 305 or 306. See the Education Department listings for additional required courses in that department. A second teaching field is required. Additional courses in Computer Science, General Science and Physics are suggested for additional interest.

Students interested in careers in engineering, industrial management, mathematical modeling, etc., which might require a background in physics-mathematics-economics-chemistry, are encouraged to speak to the appropriate department head and the director of the dual degree engineering program, or to the director of interdisciplinary studies if they wish to design an interdisciplinary program of study more suited to their career goals than a traditional departmental program.

Phys. 201-202 General Physics 4 hours each

First Semester: mechanics, heat, and wave phenomena. Second Semester: electricity and magnetism, light and selected topics in atomic and nuclear physics. Specifically intended for science, engineering, and other students who have had or are concurrently taking calculus. *Three hours of lecture and three hours of lab each week.*

Phys. 221 Introductory Electronics

4 hours

Introduction to electrical and electronic circuits and their elements, with an emphasis on applications. *Prerequisite: Phys. 201-202, or permission of the head of the department.*

Phys. 222 Digital Electronics 4 hours

An introduction to digital electronics with applications in instrumentation and computer electronics. Topics include Boolean Algebra, basic gates, logic families, encoders-decoders, astable/monostable multivibrators, flip-flops, counters, readouts, shift registers, bi-directional bus structure, serial-parallel/parallel-serial data conversion., D to A and A to D conversion. *Three hours of lecture and two hours of lab each week. Prerequisite: Math. 103 or equivalent or permission of the head of the department.* (May be taken for credit as Computer Science 222.)

Phys. 251 Mechanics 4 hours

Particle mechanics, central force motions, motions of rigid bodies, free, forced and coupled oscillations, rotations about an axis, moving coordinates systems, conservation theorems, Lagrange's equations, relativistic mechanics, mechanics of continuous media, and theory of small vibration. *Prerequisite: Physics 201-202.*

Phys. 261 Electricity and Magnetism

4 hours

Electrostatics, magnetostatics, scalar and vector fields, Poynting's vector, electrodynamics, Maxwell's equations, boundary conditions, and wave propagation. *Prerequisite: Phys. 201-202.*

Phys. 300 Modern Physics 4 hours

A presentation, based on mathematical and physical reasoning, of the foundations of modern physics. Treats the subjects of special relativity, kinetic theory, atomic theory, and introductory quantum mechanics on the level of the Schroedinger equation. *Intended for chemistry, mathematics, physics, or pre-engineering majors. Prerequisite: Phys. 201-202 or permission of the head of the department.*

Phys. 303 Statistical Thermodynamics

4 hours

Study of macroscopic systems of many atoms or molecules which provides an introduction to the subjects of statistical mechanics, kinetic theory, thermodynamics, and heat. *Material emphasizes concepts useful to those majoring in physics, chemistry, and pre-engineering. Prerequisite: Phys. 201-202.*

Phys. 305 Geometric Optics 2 hours

The study of light from a non-wave theory standpoint. This course includes the study of reflection, and optical instruments. *Prerequisite: Phys. 201-202 or permission of the head of the department.*

Phys. 306 Physical Optics 2 hours

Topics covered in this course include interference dispersion, diffraction, polarization, electro-magnetic nature of light, and quantum optics. *Prerequisite: Phys. 201-202.*

Phys. 314 Introduction to Classical Quantum Mechanics 2 hours

Continuation of the study of classical quantum mechanics begun in Phys. 300. Topics include the three-dimensional Schroedinger equation, selection rules, addition of angular momentum, fine structure in hydrogen, exchange symmetry, the Zeeman effect, and stimulated emission. *Prerequisite: Phys. 300 or permission of the head of the department.*



Phys. 316 Selected Topics in Solid State and Nuclear Physics 2 hours

Continuation of the study of modern physics. Topics include molecular bonding and spectra, free-electron theory of metals, band theory of solids, superconductivity, nuclear shell model, radioactivity, nuclear reactions, and elementary particles. *Prerequisite:* Phys. 314 or permission of the head of the department.

Phys. 318 Advanced Physics Lab

2 hours

Experiments concerning topics covered in Phys. 300 are emphasized.

Phys. 477 Seminar in Physics 2 hours

Survey of physics for review and correlation of various fields within the discipline.

Prerequisite: Permission of the head of the department.

Phys. 480 Methods and Materials in Teaching Physical and Life Sciences

4 hours

For course description see General Sciences 480. (May be taken for credit as Education 480.)

Phys. 487-488 Independent Study

2 or 4 hours each

Phys. 490 Senior Project 2-6 hours

Research problems in theoretical or experimental physics. Experimental physics is offered in such areas as: vacuum systems, machine tool operation, electron systems, spectroscopy, electron microscopy, microwave propagation, nuclear radiation and computer science. Theoretical physics projects are unlimited in scope and are arranged through consultation with the student's faculty advisor.

Politics and Public Policy

Aims

To provide for the study of American politics, political institutions and processes, patterns of political behavior, and international relations, and how these areas are related to the making of public policy; to prepare students for graduate or professional school; to enhance the career objectives of students in the theoretical, technical, and practical dimensions of administration, management, and policy in both the public and private sectors.

Requirements for Field of Concentration

Students are required to complete a minimum of 38 hours in the department exclusive of the Senior Project. All students will complete Pol. 225 and Pol. 478 plus at least 16 additional hours of classroom based courses and at least a 4-hour Internship. Related requirements are History 201-202. Cognate courses are recommended in History, Philosophy, Economics and Business, Sociology, Foreign Languages, Communications, Mathematics (especially statistics), Computer Science, and selected areas of science and technology.

Pol. 225 American Government 4 hours
Introduction to the formal and informal institutions and processes which comprise the American political system at the national level. Emphasis is placed on the mechanics of policy making and the behavior and attitudes of the American electorate.

Pol. 227-228 Intergovernmental Relations 2 hours each

This topic is presented in two half-semester courses. The first covers the introductory material on state and local governments, including U.S. constitutional provisions about states, varieties of state constitutions, typical powers of governors, state legislatures and state executive agencies, the arrangement of state courts and their importance. Major program responsibilities of state and local governments will also be covered here.

The second course will examine the development of the federal-state relationship and recent developments in federal-state and federal-local relations. The major topics included are joint programming, the grant-in-aid system, revenue sharing, and current issues and proposals regarding federal and state program responsibilities. The implications of federal decisions for states and local governments are also included. *Pol. 227 is Prerequisite to Pol. 228.*

Pol. 231 The Politics of Public Policy 4 hours

Examines selected models and approaches to the study of public policy. While providing an overview of the policy process, the focus of attention will be upon how public issues arise, how they are placed upon the public agenda, and how they are kept off that agenda. Selected case studies of public policy making will be analyzed.

Pol. 232 Public Policy Formulation 4 hours

Focuses on the development of proposed courses of action for dealing with public problems. Examines the sources of policy proposals, the criteria used by individuals in making choices and the mobilization of support for the policy choice. Special attention will be paid to the role of the policy analyst and the ethical dimensions of policy choice.

Pol. 243 International Politics 4 hours
Analysis of the factors involved in the decision-making process among nations, traditionally and in a global perspective. This analysis is applied to theoretical, historical, and current political situations.

Pol. 288 The American Political Novel 2 hours
(See History 288.)

Pol. 300 Public Administration 4 hours
An examination of the basic concerns of American public agencies, principally federal; problems of planning, organization, staffing and efficiency; problems of their proper place in the political arena; problems of relating democratic principles of administrative actions.

Pol. 311 Public Budgeting Process 4 hours

This course examines the process and politics of budgeting in the federal government, with some attention to state and local budgeting problems. The role of the President and the executive branch in budgeting, congressional processes for budget approval, and the implementation of the budget are studied in depth. Recent budgeting systems used in the federal government are included, as well as examination of the importance of budgeting to overall program and policy development in government. Students will critique an actual public budget as part of the course.

Pol. 320 Legislative Process 4 hours
The course deals with the role of Congress in federal policy-making. The constitutional powers of Congress are examined, but the primary emphasis is on the influences on Congress and its organization for decision-making. The importance of constituents, the executive branch, political parties, colleagues, congressional committees and the media are all included. Some attention is also given to state legislatures.

Pol. 321 Executive Leadership 4 hours
This course focuses on the roles of the President, governors, mayors and other political executives in the American political system. The constitutional powers, historical development, and current responsibilities and problems of the presidency are examined. The President's relations with Congress, the courts, the bureaucracy, the press and the public are also included. Similar issues are examined with respect to governors and local government executives, with emphasis on the variety of powers and approaches possible for state and local executives. Students will examine the career and contributions of one political executive as part of the course.



Pol. 322 Judicial Behavior 4 hours

The role of the courts in the political process and as policy-makers will be a focus of study. Various approaches to the understanding of the behavior of judges and legal system actors will be examined. The influence of values, social background factors, professional socialization, small group dynamics, role perceptions, interest group interaction and recruitment and selection processes on judicial and legal actor decision-making will be studied. The problems of the impact of and compliance with judicial decisions will be examined.

Pol. 325 Political Economy 4 hours

An examination of the links between the economy, polity and policy. A particular focus will be on the role of government in the allocation of goods, especially public goods. Basic socio-economic decision-making mechanisms will be critically analyzed, including the market, government, hierarchy and bargaining. A variety of political economic approaches will be examined including traditional economic, non-economic and Marxist approaches.

Pol. 328 Comparative Government

4 hours

Survey of the major approaches to the study of political systems, with attention to similarities and differences. Focuses on political parties, governmental institutions, ideologies, elites, interest groups, and political culture. The material involves specific case studies of representative countries in Western and Eastern Europe, the Soviet Union, Asia, Africa, Latin America, and the Middle East.

Pol. 331 Public Policy Implementation

4 hours

The analysis of the systemic, organizational and personal factors influencing the behavior of actors who have authority to carry out policy directives. In addition, the influence of intermediaries, administrative lobbies, issue networks, recipients-clients, the media and policy evaluators on the implementation of public policy will be studied. Legal, bureaucratic, and personal imperatives affecting the composition and interaction of actors in relation to specific policies will be examined.

Pol. 332 Public Policy Evaluation

4 hours

This course focuses on the ways in which public programs are evaluated. It examines who does evaluation and the types of evaluation methods that may be used. Students will critique and design policy evaluations as part of the course.

Pol. 339 Americal Political Parties and Interest Groups 4 hours

Study of major and minor political parties in the U.S. Attention is given to the history, structure, functions, tactics, and financing of political parties in a democratic system, as well as to the American electoral process; and a brief look at foreign party systems. The role of interest or pressure groups in a democratic pluralist society is also given major attention. *Pol. 225 or Hist. 201-202 are recommended for background in the field.*

Pol. 341 U.S. Foreign Policy 4 hours

Examination of the personalities, assumptions, and mechanics behind the making of U.S. foreign policy since World War II. The material provides a framework for analyzing and evaluating various interpretations of national security and subsequent international commitments. Reference is made to particular examples of foreign policies, such as the Truman Doctrine, Korea, Vietnam, and Sino-American and U.S.-Soviet relations. *Prerequisite: Pol. 225 or permission of the instructor.*

Pol. 357 History of Political Philosophy

4 hours

Survey of the major literature in the evolution of political philosophy from the classical period to Karl Marx, with an attempt to gain perspective on both the eastern and western traditions. A special effort is made to relate the principal concepts in political philosophy, such as justice, freedom, and equality, to contemporary politics.

Pol. 465 Constitutional Law 4 hours

Study of the judicial elaboration and interpretation of the U.S. Constitution. A case study approach to the historical development of American constitutional principles. *Pol. 225 or Hist. 201-202 are recommended for background in the field.* (May be taken for credit as History 465.)

Pol. 468 Revolution and Reaction in Modern History 4 hours

(See History 468.)

Pol. 470 Internship in Politics, Public Administration and Public Policy

4-8 hours

A faculty supervised off-campus learning experience for a student concentrating in politics with an academic dimension involving off-campus work and a substantive research project. A faculty member must approve the internship experience and the projected academic research work prior to the student's beginning the internship experience. Off-campus work will be jointly supervised by the faculty member and an approved off-campus mentor. The student will be evaluated by the faculty supervisor who may take into consideration an evaluation of the student's performance by the off-campus mentor. In all cases an internship project must be submitted for evaluation by the student in order to successfully complete the requirements for the internship.

Pol. 478 Research Methods in Political Science 4 hours

Consideration of the scope of political science through a survey of the prominent research in the field. Attention will be given to the "scientific" dimension of this work including reference to computer-assisted political analysis.

Pol. 487-488 Independent Study

2 or 4 hours each

Pol. 490 Senior Project 2-6 hours

Begins first semester of the senior year.

Psychology

Aims

To assist the student in gaining a basic knowledge of psychology as the science of human behavior; in developing social awareness and social adjustment through an understanding of the fundamental similarities and differences among people; to encourage both original and critical thinking; and to give background preparation for professions which deal with individual and group behavior.

Two Plans of Concentration

Two plans of concentration are offered – one leading to the Bachelor of Arts degree and the other to the Bachelor of Science degree.

The Bachelor of Arts plan is designed for the student who, while not wishing to pursue psychology in its professional scientific aspects, does wish to explore in some depth those areas of psychology that are applicable to his or her future life as an intellectually rounded and responsible citizen. The program is particularly relevant to individuals who are interested in working in the mental health professions or counseling either as paraprofessionals or in fields such as school psychology, rehabilitation, or guidance counseling. This program is not intended for those planning to enter regular graduate programs in psychology.

The Bachelor of Science plan is for those students who are interested in the scientific aspects of psychology – particularly for those who are considering graduate work in psychology. The department, in good conscience, will not be able to recommend to Ph.D. programs in psychology any student who has not completed the requirements of this plan.



Requirements for the Bachelor of Arts Degree

The Bachelor of Arts degree requires a minimum of 24 hours in the department (including Psychology 100, 103, 399, 415, and 477) plus a Senior Project.

Depending upon the direction of the student's interests, the department sees as particularly useful and relevant courses in sociology, social work, philosophy, child and adolescent development, biology, and the history of scientific thought. A number of upper-level courses assume the ability to use the word-processing facilities of the computer.

Requirements for the Bachelor of Science Degree

The Bachelor of Science degree requires a minimum of 30 hours in the department, including Psychology 100, 103, 311, 312, 399, 415, and 477, as well as a Senior Project. Six hours are also required in natural science. Two of these must either be in physiological psychology (Psychology 335) or in biology courses stressing animal biology, physiology, or genetics. The remaining four hours may be in similar biology courses, physics, or chemistry (including Chemistry 100).

Students planning on graduate school in psychology are also advised to take at least one course in calculus and to obtain some skills in computer programming. It should also be kept in mind that most graduate schools require Ph.D. candidates to show a reading knowledge of one or two foreign languages, usually French, German, or Spanish.

Psych. 100 General Psychology 4 hours
Introduction to the general field of psychology, including learning, motivation, sensation, perception, cognition, personality, abnormal behavior, testing, physiological psychology, and social psychology. *A full-semester course. During the academic year, the course is offered in two formats. There are three hours of lecture and two hours of lab each week, plus three hour exams and a final.*

Psych. 103 Quantitative Methods in Psychology 4 hours
An introduction to the basic problems and techniques of measurement in psychology and to basic statistical techniques used in psychological research. This course also includes an introduction to designs for research and experimentation. *Highly recommended for those planning to take upper-division courses in psychology and required of all psychology majors. Four lectures and one lab each week during the first half of the semester, two lectures and one lab each week in the second half of the semester.*

Psych. 186 Psychology of Consciousness 2 hours
Consideration of the nature of human consciousness, concentrating upon both normal consciousness and altered states of consciousness resulting from dreams, hypnosis, biofeedback, drugs, and meditation. Emphasis is given to recent explorations concerning two major modes of consciousness: the intellectual and the intuitive. *Full-semester course. Two one-hour meetings each week.*

Psych. 275 Student Development in Higher Education 2 hours
(See Education 275.)

Psych 287 Organizations and Human Behavior 4 hours
(See Econ. 287.)



Psych. 311 Experimental Psychology I 4 hours
Encourages the student to become conversant with the basic factual and theoretical content of experimental psychology at an intermediate level, and to engage in experimental work in the areas of sensation, perception, and cognitive processes. Some familiarity with computers is highly desirable. *Prerequisites: Psych. 100, 103. Full-semester course. Three lectures and one lab each week.*

Psych. 312 Experimental Psychology II 4 hours
Continuation of Psych. 311, covering the areas of learning, perceptual-motor skills, and motivation. *Prerequisites: Psych. 100, 103. Full-semester course. Three lectures and one lab each week.*



Psych. 315 Modification of Behavior
2 hours

The course has two main aims: to help the student learn systematically to analyze behavior in terms of reinforcement principles as developed by Skinner, Wolpe and others, and to help the student develop skills in the application of these principles to the modification of behavior in practical situations. Examples of the latter arise in the areas of behavior disorder, child-rearing, the work situation, and habit change. *A full-semester course.*

Psych. 324 Personality and Adjustment
4 hours

Covers major theories of personality and principles of personal adjustment and growth, including development, motivation, dynamics, problems in group living, and intellectual, emotional, and social adjustment. The course should be valuable to the potential doctor, nurse, social worker, child-care worker, teacher or parent. *Full-semester course. Three lectures and one lab each week.*

Psych. 325 Abnormal Psychology 4 hours
The development, dynamics, social significance, and theoretical implications of deviant behavior. While the traditional psychiatric diagnostic categories are studied, there is a strong emphasis upon alternative approaches in the medical model of abnormality. The concepts of normality and abnormality in relation to cultural norms and stereotypes are examined in depth. The course should prove particularly useful to students planning on a career in the helping professions. *Full-semester course. Four lectures each week.*

Psych. 326 Experimental Social Psychology 4 hours

Aspects of social behavior and specific social issues are examined within the context of theory and experimental research. Topics include social factors in the development of morals; cooperation and competition; aggression; racial and social-class differences in personality, motivation, and language; attitudes and attitude change; authoritarianism and obedience; interpersonal and group processes (affiliation, attraction, perception, conformity, and leadership); and discussion of drug and sex issues. *Full-semester course. Four lectures each week.*

Psych. 327 Seminar in Theories and Techniques of Psychotherapy and Counseling 4 hours

Provides the student with a basic knowledge of the varied theories and techniques used in professional psychotherapy and counseling. Both academic and experiential learning are included, which should be particularly useful to students interested in going on into one of the helping professions such as clinical psychology, psychiatry, social work, school psychology, counseling, or occupational therapy. *Prerequisites: Psych. 100 and 324 or 325 plus permission of the instructor.*

Psych. 328 Human Sexuality 2 hours
Examination of the various psychological, biological, social, comparative, legal, and ethical aspects of human sexuality. In addition to sexual anatomy, physiology, birth control, and venereal disease, the course takes up current issues such as a sex-role development, sex reassignment, and sex therapy. (May be taken for credit as Education 328.)

Psych. 335 Biological Bases of Behavior 2 hours
Examines the neural and biochemical substrates of the more important aspects of animal and human behavior. *Prerequisite: Psych. 100. Half-semester course. Three hours of lecture and one lab each week.*

Psych. 399 Junior Preparation 4 hours
This course is designed to help students round out their background in the content and methods of psychology in preparation for their senior year. An intensive review of the various fields of psychology is undertaken and methods of field research and program evaluation strategies are studied. *Some familiarity with computers is highly desirable. A full-semester course meeting three hours per week.*

Psych. 410 Tests and Measurements
2 hours
(See Sp. Ed. 410.)

Psych. 415 Systematic Psychology
4 hours
Examination of the systematic positions and theories that have been important in the history of psychology, as well as a brief review of the philosophical bases underlying these positions. *Full-semester course. Four lectures each week.*

Psych. 477 Senior Seminar 2 hours
An introduction to professional opportunities in psychology and related fields and an exploration of value and ethical consideration. Continued guidance on senior project and senior comprehensive examinations also will be provided during the course.

Psych. 480 Methods and Materials in Teaching Psychology 4 hours
Study of the methods and materials used in teaching psychology in the secondary school. The course has a systematic and experimental emphasis. *Prerequisite: 16 hours of psychology. (May be taken for credit as Education 480.)*

Psych. 487-488 Independent Study
2 or 4 hours each

Psych. 490 Senior Project 2-8 hours



Religious Studies

Aims

The department desires to continue the historic interest of the College in the intellectual, spiritual, and social development of the community. Students are encouraged to join in the exploration of thought and research in the field of religious studies. Biblical studies form the central core of departmental offerings. In addition, each student also examines the relationship between religion and culture (both ancient and modern). The personal integration of knowledge and faith for an understanding and appreciation of value systems is a conscious goal of the department.

The department's aims are future-oriented. Rather than teaching a particular point of view, the department seeks to assist the student in learning how to acquire, evaluate, and use religious knowledge. Each course is consciously designed to enhance the student's efforts to interrelate his or her varied academic, social, and personal experiences.

Requirements for Field of Concentration

A minimum of 28 hours (excluding Religious Studies 100) in the department, a Senior Project, and the successful completion of the Senior Comprehensive Examination constitute the stated requirements of the department.

The Comprehensive Examination in Religious Studies emphasizes Biblical studies, comparative religions, and contemporary religious thought and culture. All students completing a successful Religious Studies major will be expected to complete R.S. 300 and four

additional hours of advanced Old Testament study, R.S. 311 and four additional hours of advanced New Testament study, four hours in world religions (R.S. 341, or 342, or 352), four hours in contemporary religious thought (R.S. 336, or Phil. 325 or Phil. 355) and four hours of religion and society (chosen from R.S. 360, or R.S. 383, or Soc. 356, or Phil. 124).

Students electing the field of religious studies are strongly urged to develop a proficiency in one or more foreign languages, to formulate a related field of concentration and to consider spending at least one semester in study abroad.

R.S. 100 Judaeo-Christian Heritage and Contemporary Living 4 hours
Study of the Judaeo-Christian heritage with the aim of understanding how Biblical writers reflect on the basic human and social issues which continue to engage contemporary people. Study is done within a triple context: (1) the Biblical tradition; (2) the liberal arts tradition of Bethany College; and (3) contemporary questions.

R.S. 300 Old Testament Literature and Thought 4 hours
Study of the development of Israelite religion and its institutions, the history of the various types of Old Testament literature, and the thought and theological motifs of Old Testament writers. Students will be assisted in acquiring a developmental understanding of Old Testament religion and an appreciation of its continuing value. *Prerequisite: R.S. 100 helpful, but not required.*

R.S. 302 Wisdom Literature 2 hours
Critical and appreciative reading of the literature of the Old Testament wisdom school (Proverbs, Job, and Ecclesiastes). Students are assisted to understand the ways in which the wisdom school sought to understand human meaning and destiny.

R.S. 304 Mission and Message of the Prophets 2 hours
Critical and appreciative reading of selected writings of the classical prophets of ancient Israel (Amos, Hosea, Isaiah, Jeremiah, and Ezekiel). Students are assisted to understand the major ideas of the prophets and the relationship of these ideas to the issues facing both ancient and modern people.

R.S. 310 New Testament Literature and Thought 4 hours
Study of the development of earliest Christianity (A.D. 30-125) and its institutions, the history of various types of New Testament literature, and the thought and motifs of various New Testament writers. Students will be assisted in acquiring a developmental understanding of the New Testament and an appreciation of its continuing value. *Prerequisite: R.S. 100 helpful, but not required.*

R.S. 311 Studies in the Gospels 4 hours
Students are assisted in developing the means to discern the message of the different gospel writers. While concentrating on the Gospel of Mark, the course equips the student to do basic study in any of the Gospels. *Prerequisites: R.S. 100 and permission of the instructor.*

R.S. 312 The Pauline School 4 hours
Students are assisted in developing an understanding of the Apostle Paul as a man, his thought, his place in early Christianity, the thoughts of his disciples and his opponents. *Prerequisites: R.S. 100 and permission of the instructor.*

R.S. 313 Apocalypticism 4 hours
Students are assisted in developing a facility to understand the messages of Daniel, the Revelation of St. John and other apocalyptic materials, to explore the history of apocalyptic imagery and literary relationships, and to discover the backgrounds and causes of the rise of the apocalyptic movement.

R.S. 314 The Gospel of John 2 hours
The student will study the Fourth Gospel as an important document in the history of religions, as a special literary form and composite, as a witness to the historical Jesus, and as a continuing witness to faith and to the meaning of human existence.

R.S. 322 Sociology of Religion 2 hours
(See Sociology 356.)

R.S. 336 20th Century Protestant Thought 4 hours
Students read and discuss the work of leading 20th century Protestant thinkers such as Paul Tillich, Karl Barth, Dietrich Bonhoeffer, and the Niebuhrs.

R.S. 341 The Religions of India 4 hours
Students explore the chief features of Indian religion. The course begins with an examination of Hinduism and includes a survey of the origins of Buddhism and a study of Indian Islam and Sikhism.

R.S. 342 The Religions of China 4 hours
Students explore the chief features of Chinese religion. The course begins with a consideration of the most ancient features of Chinese religion, continues with a study of the historical development of Confucianism, Taoism, and Chinese Buddhism and concludes with an analysis of the influence of religion on Chinese society.

R.S. 351 Ancient Near Eastern Civilization 4 hours
This course introduces the students to the historical development of life, culture, and religions of Mesopotamia, Egypt, and the Syro-Phoenician coast, including international relations from pre-history to Alexander the Great. (May be taken for credit as History 351.)

R.S. 352 Islamic Civilization 4 hours
Study of the life and background of the prophet, the *Qur'an*, the development of Islamic thought, and the early Islamic empires.

R.S. 353 Hellenistic Civilization 4 hours
Development of an acquaintance with the Graeco-Roman Oriental world based on a survey of social and cultural developments from Alexander the Great to Julius Caesar. (May be taken for credit as History 353.)

R.S. 361 American Catholicism 2 hours
A descriptive study of contemporary American Catholicism and its roots. The course emphasizes such topics as: modern Catholic worship, the crisis of authority, the "immigrant church," the church and political life, Catholic education, and the charismatic movement.



R.S. 362 American Judaism 2 hours
A descriptive study of contemporary American Judaism and its roots. The course emphasizes the life-cycle customs of Judaism. Jewish holidays are studied in the context of Jewish history. The course seeks to develop a broader understanding of the modern Jewish community in the United States and is supported by a grant from the Jewish Chautauqua Society.

R.S. 363 Alexander Campbell and His Reformation 4 hours
Students will study the backgrounds, life, thought and historical contexts and outcomes of Alexander Campbell, his colleagues and successors. Lectures, debates, multi-media materials and field work will be included. Special emphasis will be placed on primary sources and each student will complete a satisfactory primary research project.

R.S. 370 Renaissance and Reformation History 4 hours
The course will trace briefly the development of the Renaissance and will concentrate on the chief reformers of the sixteenth century – Zwingli, Luther, and Calvin.

R.S. 373 History of Early Christianity 4 hours
Introduction to the origins and expansion of Christianity from the period of Augustus Caesar to Constantine. The problems of institutions, consolidation, varieties, divisions, and unification will be explored in historical context.

R.S. 374 History of Eastern Christianity 4 hours
A study of the development of the Eastern Roman Empire and Byzantine Christianity from Constantine to the fall of Constantinople. Special attention will be given to the Eastern Fathers in both the Greek and Semitic developments of the church.

R.S. 376 History of Medieval Christianity 4 hours
Examination of the major developments within European Latin Christianity between the sixth and fourteenth centuries. Topics covered include: the conversion of Europe; relationships between church and state; contacts and conflicts with Byzantine Christianity and Islam; monasticism; the development of theology and Christian culture; reform, dissent, heresy and schism.

R.S. 380 Ethics and Society 4 hours
Studies in contemporary social-ethical and public policy issues from the perspective of classical and modern Judaeo-Christian thinking. Topics such as political and economic justice, war and peace, revolutionary movements, and environmental policy will be included. *No prerequisites, although completion of R.S. 100 is desirable.*

R.S. 381 Church Leadership Practice 2 hours
Development of an understanding of the theory and practice of public worship, preaching, and church program planning.

R.S. 382 Cultural Life in the Middle East and North Africa 4 hours
(See History 382.)

R.S. 383 Introduction to Bioethics 4 hours
Consideration of the religious and ethical dimensions involved in human decisions concerning abortion, artificial birth control, genetic planning, euthanasia, organ transplants, medical experiments on human subjects, and various forms of behavior modification.

R.S. 487-488 Independent Study 2 or 4 hours each

R.S. 490 Senior Project 2 to 8 hours

Science Applications (Honors)

Aims

The Honors Program in Science Applications prepares students in the current theoretical and applied knowledge, skills, and techniques of applied sciences and engineering design; provides an engineering and scientific foundation for applied research through integrated studies in the physical and life sciences, mathematics, and computer science; produces a graduate with science and engineering preparation for graduate schools and corporate, industrial, and government research career options; achieves a combined technical and liberal arts education serving future career advancement in technological leadership roles.

Requirements for Field of Concentration

Admission to this program is selective. All students in the program are required to complete a common base of 40 hours, including Chemistry 101-102, Physics 201-202, 222, Computer Science 201-202, Mathematics 201-202 and 341. In addition, all students will complete 8 hours of a common, upper-level, applied research and design component

consisting of an Internship, a Research and Applications course, and a Senior Project; these are, respectively, Science Applications 470 (2 hours), 475 (4 hours), and 490 (2 hours).

All students will also elect one of the following options: 1) For the degree in Science Applications, 24 hours of course work selected from the courses listed below, at least 12 of which must be chosen within a single area as listed. 2) For the degree in Chemistry, Mathematics, Computer Science, or Physics, 24 hours within the appropriate listing of courses for that field. (Biochemistry is part of the Science Applications degree program but is not a separate field of concentration.)

Chemistry 211-212, 226, 324, 326, 402, 414.

Mathematics 203, 344, 354, 383-384, 390, 401.

Computer Science 280, 290, 330, 370, 380, 390; Mathematics 354.

Physics 251, 261, 300, 303, 305-306, 314, 316, 318.

Biochemistry: Biology 210, 290, 343, 425, 467; Chemistry 211-212, 314.

It is recommended that students in the program also complete a Professional Core in Management, Public Affairs, or Communication.

S.A. 470 Internship in Science Applications 2 hours

A faculty supervised, off-campus industrial work experience, co-sponsored and coordinated with a participating industry. *Prerequisites: Junior standing and approval of the Director of the Honors Program in Science Applications.*

S.A. 475 Research and Applications 4 hours

Intensive exploration of research and design techniques with specific applications in the student's individual area of specialization. *This course is to be coordinated with the Internship and Senior Project.* *Prerequisites: Senior standing and approval of the Director.*

S.A. 487-488 Independent Study 2 or 4 hours each

S.A. 490 Senior Project 2-8 hours

Social Sciences

Social Sciences is a grouping of courses only. It is not a separate department. Students who participate in such programs as the American University Washington Semester and other similar off-campus programs may receive credit in this area.

Students majoring in History, Politics and Public Policy, Economics or Sociology who wish to be recommended for state certification in Social Studies must complete the following courses: History 100, 201, 202, 225; Soc. 100 or 220; Eco. 200; G.S. 202 or Soc. Sci. 302; Pol. 225, as well as 24 hours in their major field. See the Education Department listings for required Professional Education courses.

Soc. Sci. 302 World Geography 2 hours
Study of the physical, social, and political geographic factors of the world. Recent changes in Europe, Asia, and Africa are discussed.

Soc. Sci. 320 Cultural Backgrounds of British Literature 4 hours
Survey of British history from the Celtic times to the present. Major political developments such as the development of parliamentary government and the constitution are taken into account, but major emphasis is placed on extra-political matters such as the development of the English language, music, art, architecture, drama, the English church, education, and domestic life. Every effort is made to take advantage of the locale to visit museums, castles, cathedrals, universities, Parliament, theatres, and concert halls. Taught in Oxford, England.

Soc. Sci. 480 Methods and Materials in Teaching Social Studies 2 hours
Nature, objectives, and curricula of social studies in junior and senior high schools. Concepts and methods of approach are emphasized. Methods, techniques, teaching aids, resource units, lesson plans, evaluation, and teaching reading and study skills. (May be taken for credit as Education 480.)

Sociology and Social Work

Aims

To acquaint students with basic theories, research techniques, and applied practices in sociology, social work, and anthropology, and to prepare students for graduate study in these disciplines, or to enter professions in community service and other fields which require a knowledge of social relations.

Requirements for Field of Concentration in Sociology

A minimum of 36 hours in Sociology, including Sociology 100, 200, 209, and 477, plus a Senior Project. Also required: Mathematics 281 or Psychology 103. Sociology 100 or 220 is a prerequisite to Sociology 200, 309, 320, 329, 330, 353, 361, 362, 470, and 477.



Soc. 100 Introduction to Sociology

4 hours

Introduction to basic concepts and perspectives of the study of society. Includes analysis of principal institutions and social processes.

Soc. 105 Computers and Society 2 hours
(See Computer Science 100)**Soc. 200 Sociological Theory** 4 hours
Examination of social thought with primary emphasis upon the principal theorists from the 19th century to the present.**Soc. 205 Social Problems** 4 hours
Though emphasis and illustrations will vary as the scene changes, the course is built on the analysis of fundamental and continuing problems and dilemmas, such as crime and delinquency, racial and ethnic relationships, health care and maintenance, employment, housing, poverty, and environmental issues.**Soc. 209 Research Methods** 4 hours
The student is guided through the formal process of designing an empirical project. Emphasis is placed upon systematically reviewing relevant literature and justifying decisions concerning techniques to be used. Includes hypothesis formation and testing, methods of data collection and analysis, and problems of sampling. *Prerequisite:* Math 281.**Soc. 210 Race and Minority Concerns**

2 hours

A survey of racial, cultural, ethnic, age and sexual diversity with emphasis on the effects of prejudice and discrimination on minorities.

Soc. 220 Cultural Anthropology 4 hours
Examination of cultural variability, especially in terms of its influence on human behavior. Comparative analysis of cultural systems with an emphasis on contemporary non-Western societies.**Soc. 300 Social Movements** 2 hours
Examination of the origins and development of religious, political, agrarian, and labor movements. Both historical and contemporary examples of revolutionary and reform movements will be analyzed.**Soc. 302 Schools and Society** 4 hours
(See Education 302)**Soc. 309 Formal Organization** 4 hours
Analysis of commercial, industrial and public organizations and bureaucracies. Morale, subgroup conflict and cooperation, and the impact of social environment or organizational structure.**Soc. 329 Population Study** 2 hours
An introduction to demography. Theories and methods of studies concerning population size and composition. Trends of population change in the world and in the United States.**Soc. 351 The Family** 4 hours
Examination of the structure and function of the family as a basic unit of social organization. Changing nature of marriage and the family in American society.**Soc. 353 Social Stratification** 2 hours
Study of forms of social stratification and differentiation. Class, prestige and power as the bases of stratification. Theories of the cause of social stratification and social mobility.**Soc. 356 Sociology of Religion** 4 hours
Formal religion and its functional equivalents both in primitive and modern societies. The relationship between religion and other social institutions. Religion and social change. (May be taken for credit as Religious Studies 322.)**Soc. 361 Deviance and Social Control**

4 hours

Sociological perspectives focusing on problems of deviance such as crime, mental illness, and sexual deviation. Institutions of correction and rehabilitation are examined.

Soc. 362 Socialization 2 hours
Study of socialization as a process whereby the individual becomes a functioning member of a group. Processes of resocialization.**Soc. 470 Field Work** 2-8 hours
Available to students who are sufficiently advanced in their theoretical and methodological studies to undertake investigation of a practical or theoretical problem in a field setting. *Prerequisite:* Permission of Department.**Soc. 477 Senior Seminar** 4 hours
Consideration of conceptual and research problems in a seminar setting. Includes preparation for comprehensive examinations and senior projects.**Soc. 487-488 Independent Study** 2 or 4 hours each
Studies may be planned as extensions of, or separate from, existing Department offerings.**Soc. 490 Senior Project** 2-8 hours
For students approaching completion of their majors. Designed to help students evaluate their activities in sociology and to integrate their educational experiences.

Requirements for a Degree in Social Work

The goal of the social work program is to prepare the student for beginning social work practice. Students will accomplish this goal by completing 38 hours of social work courses to include: S.W. 120, S.W. 201, S.W. 202, S.W. 220, S.W. 230, S.W. 240, S.W. 310, S.W. 350, S.W. 352, S.W. 470, and S.W. 477. In addition, students must complete Bio. 100, Soc. 205, Soc. 209, Soc. 210, Psych. 100, Psych. 326, Pol. 227, and completion of a Senior Project in Social Work. Social Work 120 or 240 or permission of the department head is a prerequisite to all courses in Social Work, except Social Work 125-150, 230 and 310.

Within the Social Work curriculum students will be able to pursue a variety of concentrations to include child welfare, aging, public welfare, health care, corrections, mental health, school social work, and church community relations.

Students electing the field of study in Social Work are expected to take a course in human anatomy and physiology and to select Perspectives courses to include: Economics 200, Education 201 and 202, Sociology 100, Psychology 315, 324 and 325.

S.W. 120 Introduction to Social Welfare and Social Work 2 hours

An examination of the origin and development of social welfare as an institution in the United States. Examination of the role of the social worker, and the place of the profession in society.

S.W. 125-150 Special Topics in Social Work 2 or 4 hours each

Seminars in this category take up special topics of mutual concern to faculty and students.

S.W. 125 Child Welfare Services 2 hours

This course is a comprehensive study of the principal child welfare services. It begins by defining child welfare, placing it as a field of practice within social work, and presents a scheme for the categorization of child welfare problems in terms of role theory. It provides a historical perspective on how and why welfare services developed to describe the current socioeconomic context in which they operate. Topics covered include adoption, child abuse and neglect, day care, foster care and other child caring institutions.

S.W. 130 Alcohol Use & Abuse 2 hours
Designed to provide alcohol education to those interested in better understanding the effects of alcohol on individuals, families, and the community at large. Topics for study include: the use and misuse of alcohol throughout history, effects of alcohol on the human body, personal and societal costs of drinking, etiology of alcoholism, and considerations for special populations.

S.W. 135 Working With the Aged 2 hours

This course is a study of the biological, psychological, social, economic, cultural and spiritual factors of the aged in society. The course will provide an overview for persons in the helping professions who want to work with older people individually or with members of families, groups or organizations. Research efforts will be presented that illuminate our present knowledge about various aspects of aging and about the heterogeneous elderly population in the United States.

S.W. 201 Human Development I
4 hours
(See Education 201.)

S.W. 202 Human Development II
4 hours
(See Education 202.)

S.W. 220 Social Welfare Policies and Services 4 hours

Examines the social, political and economic context of social welfare policies and programs. Analysis of specific policy issues and their implications for professional social work practice.

S.W. 230 Social Welfare Institutions 2 hours

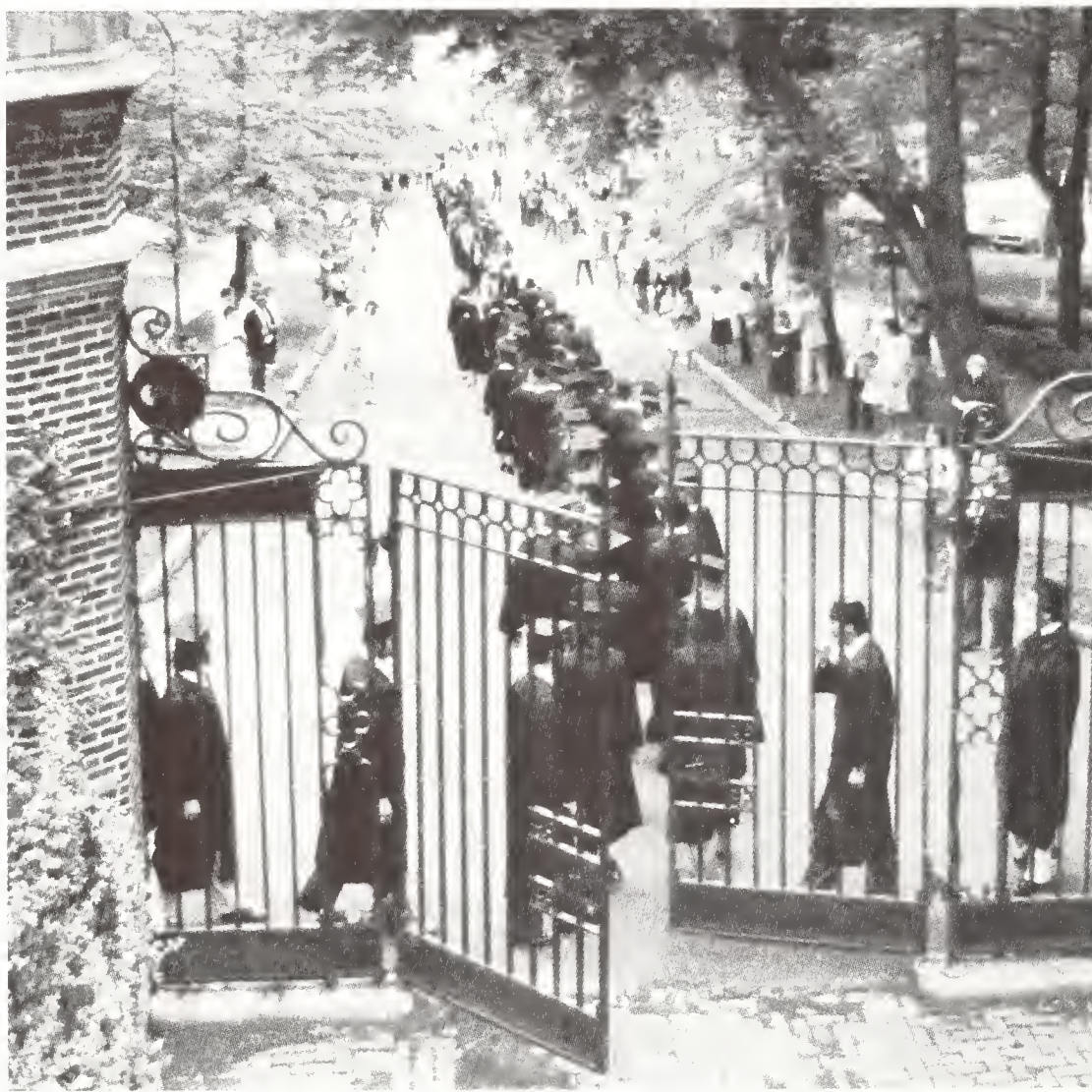
Critical examination of organized societal response to social welfare need. Conducts a conceptual analysis of the scope and intent of social welfare programs, clarifying the concept of social welfare and showing how welfare intent is carried into constructive social action.

S.W. 240 Introduction to Social Work Practice 2 hours

An introduction to basic dynamics necessary to engage clients in the social work process. Beginning listening, interviewing, and recording skills will be emphasized.

S.W. 310 Human Behavior and the Social Environment 4 hours

Focuses on the person as an individual with the continuing potential for growth and change. The maturational process of the individual will be followed with emphasis being given to interaction with the social environment, coping abilities and capacity for change. The bio-psycho-socio-cultural determinants of behavior are studied integrating knowledge of the person-in-his/her situation.



S.W. 350 Social Work Practice and Methods I 4 hours

Basic theories and concepts undergirding skills for professional social work practice. Study focuses on professional values, social work roles, and social work client relationships. Skills in interviewing, data collection and case recording are explored and practiced.

S.W. 352 Social Work Practice and Methods II 4 hours

In-depth and advanced examination of the social work process. Problem solving and intervention strategies are studied in relation to prevention, maintenance, and rehabilitation. The skill of social work practice is explored in the context of current programs and practice methods.

S.W. 470 Field Placement 12 hours

An educationally directed internship experience in a social welfare agency or program as a social work practitioner. The field experience will involve five full days a week agency experience during the fall semester of the senior year of study. The placement is designed to test and increase student practice skills with the goal of self direction and the appropriate use of supervision and consultation within the social work practice setting.

S.W. 477 Field Practice Seminar

4 hours

Provides advanced professional knowledge which examines problems and issues of social work practice. The transitional role of the student moving from an undergraduate academic setting to the world of work and/or graduate study will be explored. Need for specific content not previously available to the student is arranged.

S.W. 487-488 Independent Study

2 or 4 hours each

Studies may be planned as extensions of, or separate from existing Social Work offerings.

S.W. 490 Senior Project 2-8 hours

Study will be directed in a specialized concentration of social work practice. Designed to allow the student to integrate both the field placement and academic experience.



The Directories

BOARD OF TRUSTEES

Officers of the Board

CHARLES D. BELL, *Chairman*

TODD H. BULLARD, *President*

ROBERT O. SEIDEWITZ, *Treasurer and Chief Business Officer*

WILLIAM F. PORTER, *Secretary*

ANN W. TROMBADORE, *Assistant Secretary*

Term Expires June 1986

CHARLES D. BELL, 67 Seventh Street, Wellsburg, West Virginia

ROBERT F. CORY, 420 Blackhawk Road, Beaver Falls, Pennsylvania

WILLIAM E. LEWELLEN, U.S. Steel Corporation, U.S. Steel Building, Pittsburgh, Pennsylvania

ROBERT MACKENZIE, JR., 5 Duck Hook Circle, River Hills Plantation, Clover, South Carolina

ANN C. PRESTON, 1324-D Pelican Creek Crossing, St. Petersburg, Florida

JOHN W. RENNER, 29942 Bolingbrook Road, Pepper Pike, Cleveland, Ohio

WILLIAM S. RYAN, Edmondson Avenue at Academy Road, Baltimore, Maryland

ANN W. TROMBADORE, 626 Watchung Road, Bound Brook, New Jersey

ROBERT C. WETENHALL, McConnell, Wetenhall & Co., Inc., 375 Park Avenue, New York, New York

Term Expires June 1987

MARSHALL L. BERKMAN, AMPCO-Pittsburgh Corporation, 700 Porter Building, Pittsburgh, Pennsylvania

EDWIN V. CLARKE, JR., Westinghouse Electric Corporation, Gateway Center, Pittsburgh, Pennsylvania

JAMES L. COLLINS, 2 Willow Springs Road, Wheeling, West Virginia

JAMES F. COMPANION, Schrader, Stamp, Byrd, Byrum & Companion, 1000 Hawley Building, Wheeling, West Virginia

MICHAEL J. KASARDA, R.D. 4, Box 65140, Bellaire, Ohio

HARRY MARTENS, Commercial Union Insurance Companies, One Beacon Street, Boston, Massachusetts

EUGENE MILLER, United States Gypsum Company, 101 South Wacker Drive, Chicago, Illinois

G. OGDEN NUTTING, The Ogden Newspapers, Inc., 1500 Main Street, Wheeling, West Virginia

HAROLD R. WATKINS, Board of Church Extension of the Christian Church (Disciples of Christ), 110 South Downey Avenue, Indianapolis, Indiana

FRANK L. WIEGAND, JR., 855 Academy Place, Pittsburgh, Pennsylvania

Term Expires June 1988

ALTON W. BEHM, M.D., 12334 George Drive, High Point, Brookville, Florida

COURTNEY BURTON, Oglebay-Norton Company, 1100 Superior Avenue, Cleveland, Ohio

WILLIAM R. HOAG, West Elizabeth Lumber Company, 1 Chicago Avenue, Elizabeth, Pennsylvania

RODNEY B. HURL, M.D., 211 Stocksdale Drive, Marysville, Ohio

THOMAS P. JOHNSON, 1500 Oliver Building, Pittsburgh, Pennsylvania

WILLIAM L. MILLER, JR., The Christian Church (Disciples of Christ) in the Upper Midwest, 3300 University Avenue, Des Moines, Iowa

WILLIAM F. PORTER, 946 Park Boulevard, East Liverpool, Ohio

JOHN G. REDLINE, JR., State Capitol, Building 6, Room 553, Charleston, West Virginia

Faculty Representative to the Board

DAVID J. JUDY, Bethany, West Virginia

Honorary Trustees

A. DALE FIERES, 236 Inlet Way, Palm Beach Shores, Florida

PERRY E. GRESHAM, Highland Hearth, Bethany, West Virginia

PAUL A. NORTON, 20 Church Street, A-30, Greenwich, Connecticut

CHARLES E. PALMER, 150 Royal Oak Drive, Apt. 605, McKeesport, Pennsylvania

MALCOLM W. RUSH, 3096 Orchard Road, Cuyahoga Falls, Ohio

JOSEPHINE SHEETS WICKERHAM, 7150 Estero Boulevard, Ft. Myers, Florida

Committees of the Board of Trustees

(The President of the College is an *ex officio* member of all committees.)

EXECUTIVE (Elected)

Michael J. Kasarda, Chairman; Charles D. Bell, William R. Hoag, Rodney B. Hurl, Thomas P. Johnson, Harry Martens, G. Ogden Nutting, William F. Porter, Ann C. Preston, John G. Redline, Harold R. Watkins

FISCAL AFFAIRS (Elected by Executive Committee)

William F. Porter, Chairman; Robert F. Cory, Michael J. Kasarda, Eugene Miller, G. Ogden Nutting, (Charles D. Bell, Robert O. Seidewitz, *ex officio*)

INVESTMENT (Elected)

Frank L. Wiegand, Jr., Chairman; William R. Hoag, Thomas P. Johnson, William E. Lewellen, Harold R. Watkins, (Charles D. Bell, Robert O. Seidewitz, *ex officio*)

CAMPUS PLANNING

James L. Collins, Chairman; Alton W. Behm, Marshall L. Berkman, James F. Companion, William R. Hoag, Robert Mackenzie, Jr.

CHURCH RELATIONS

William L. Miller, Jr., Chairman; Ann C. Preston, William S. Ryan, Harold R. Watkins

DEVELOPMENT

Rodney B. Hurl, Chairman; Courtney Burton, James L. Collins, Robert F. Cory, William R. Hoag, Robert C. Wetenhall, Frank L. Wiegand, Jr.

LONG-RANGE PLANNING

James L. Collins, Chairman; Rodney B. Hurl, William E. Lewellen, William L. Miller, Jr., Ann W. Trombadore

NOMINATION

William F. Porter, Chairman; Alton W. Behm, Charles D. Bell, Rodney B. Hurl, Michael J. Kasarda, Ann C. Preston

COLLEGE COMMUNITY

Ann W. Trombadore, Co-Chairman; John W. Renner, Co-Chairman; Alton W. Behm, Marshall L. Berkman, James F. Companion, Robert F. Cory, Rodney B. Hurl, Robert Mackenzie, Jr., Ann C. Preston

ALUMNI COUNCIL MEMBERS 1985-86

GWENDOLYN DAVIS ALLEN, Bethany, West Virginia

SALLY SCHREIVER BADO, Pittsburgh, Pennsylvania

TRUDY LYNN BERKEY, Washington, Pennsylvania

JUNE MONTGOMERY BOOHER, Wellsburg, West Virginia

JOYCE DUMBAUGH CHERNENKO, Wellsburg, West Virginia

CARYN TEUTSCH CHERNICKY, Bethel Park, Pennsylvania

STEPHEN K. CHERNICKY, *President*, Bethel Park, Pennsylvania

TERRY A. CRAIG, Canonsburg, Pennsylvania

SCARLETT LEE FOSTER, Charleston, West Virginia

JUDITH A. FLYNN, Pittsburgh, Pennsylvania

DONALD R. FORD, Warren, Ohio

BENJAMIN GRIFFITH, Bethel Park, Pennsylvania

VERNON HOLDEN, Wexford, Pennsylvania

WILLIAM KIEFER, Weirton, West Virginia

J. HARRY LAMMERT, JR., Pittsburgh, Pennsylvania

DALE LAUGHNER, Beaver Falls, Pennsylvania

S. DEAN LESIAK, Bay Village, Ohio

ROBERT L. MARTIN, Wheeling, West Virginia

JOSEPH W. MAYERNICK, *Vice President*, Weirton, West Virginia

NANCY TOMASEK RATCLIFFE, Wheeling, West Virginia

JAMES P. O'ROARK, Beaver Falls, Pennsylvania

L. JAY SMITH, West Bloomfield, Michigan

JOHN R. TAYLOR, Bethany, West Virginia

KENNETH W. VALUSKA, Hudson, Ohio

DAVID RALPH WILLIAMS, Annandale, Virginia

TRUSTEE MEMBERS, EX-OFFICIO

ROBERT F. CORY, Beaver Falls,
Pennsylvania
RODNEY B. HURL, M.D., Marysville, Ohio

ADMINISTRATION

TODD H. BULLARD, **President**

ROBERT A. SANDERCOX, **Vice President
and Provost for College Advancement**

THOMAS H. STEIN, *Director of Admission*

JERALD E. FUQUA, *Director of Church
Relations*

RUTH L. WESTLAKE, *Director of Public
Information and Publications*

JOHN W. WHITE, *Associate Director of
Admission*

SHERYL L. GREENLEE, *Admission
Counselor*

SUSAN E. LEMLEY, *Admission Counselor*

KATHLEEN J. FAULKENBERRY,
*Assistant to Director of Public Information
and Publications*

ROBERT C. NOLAN, **Vice President for
Development**

KRISTINE L. STEIN, *Director of
Development Research and Writing*

WM. DANIEL COBB, III, **Vice President
and Dean of Faculty**

JOSEPH M. KUREY, *Assistant Dean for
Academic Administration*

JOHN C. GIESMANN, *Registrar*

RUTH MARTIN JONES, *Assistant to the
Registrar*

JONAS BARCIAUSKAS, *Head Librarian*

TONI P. OLSHAN, *Reference Librarian*

RUSSELL J. COOK, *Director of Video and
Media Services*

EDWIN GOLDIN, *Director of the
Center for Academic Computing*

LEONORA BALLA CAYARD, *Coordinator
of the International Education Programs*

LARRY E. GRIMES, *Director of Liberal
Studies*

ANN C. SHELLY, *Director of Teacher
Preparation Programs*

ROBYN R. COLE, *Director of Writing and
Developmental Studies*

MICHAEL A. POLASCIK, *Athletic Trainer*

JOHN S. CUNNINGHAM, **Executive Dean
for Student Affairs**

DARLINE B. NICHOLSON, *Dean of
Student Life and Director of Renner
Union*

CHRISTINE OSSMAN, *Assistant Dean of
Students and Coordinator of Freshman
Residence Halls*

THEODORE W. BUNNELL, *Director
of Financial Aid*

BETH DAMEIER, *Associate Director
of Financial Aid and Coordinator of
Financial Aid Services for Current
Students*

ANNE ZALACCA, *Assistant Director
of Financial Aid and Coordinator of
Financial Aid Services for Incoming
Students*

JOANNE SYKES, R.N., *Supervisor of
the Infirmary*

JAMES COMERCI, *College Physician*

BASIL P. PAPADIMITRIOUS, M.D.,
College Physician

WILLIAM B. ALLEN, *College Chaplain*

FATHER LEWIS F. GAETANO,
Roman Catholic Chaplain

DANIEL M. LOWY, *Jewish Chaplain*

W. CARROLL THORN, *Episcopal Chaplain*

DOUGLAS SMITH, *Assistant Chaplain*

GRETCHEN SMITH, *Administrative
Assistant to the Dean of Student Services*

ROBERT O. SEIDEWITZ, **Treasurer and
Chief Business Officer**

JOSEPH M. KUREY, *Associate Business
Officer*

THOMAS A. FERRIS, *Director of Physical
Plant*

SHIRLEY M. JACOB, *Assistant Treasurer
and Accountant*

PATRICIA LOWE, *Administrative Assistant
Payroll/Benefits*

NANCY AULT, *Manager of the Leadership
Center*

ANN CRAFT, *Manager of College Store*

LYNN E. QUEEN, *Director of Data
Processing*

RICHARD PIKE, *Director of Dining Service*

THE LEADERSHIP CENTER
**Office of Career and Professional
Development:**

FRANCESCA GIORDANO, *Coordinator of
Counseling Services*

GWENDOLYN ALLEN, *Coordinator of
Placement Services and Campus
Employment*

Summer Programs

Leadership Center Programs

THE FACULTY

TODD H. BULLARD, *President of the College on the M.M. Cochran Foundation and Professor of Political Science.* (1980). Bethany College; B.A., West Liberty State College; M.A., West Virginia University; Ph.D., University of Pittsburgh.

WM. DANIEL COBB III, *Vice President and Dean of Faculty.* (1977).

A.B., Transylvania University; B.D., S.T.M., Yale University; A.M., Ph.D., The University of Chicago.

ROBERT A. SANDERCOX, *Vice President and Provost for College Advancement.* (1957).

B.A., Bethany College; M.Div., Yale University; University of Buffalo; West Virginia University.

JOHN S. CUNNINGHAM, *Executive Dean for Student Affairs.* (1967).

B.S., Slippery Rock State College; M.Ed., Kent State University; Ed.D., West Virginia University.

Emeriti

FORREST H. KIRKPATRICK, *Dean of Students and Professor Emeritus* (1927-1952) and *Adjunct Professor of Economics and Business.* (1952-1958; 1970). University of Dijon; B.A., Bethany College; M.A., and Prof. Dipl., Columbia University; University of Pittsburgh; University of London; University of Pennsylvania; University of Cambridge; LL.D., Bethany College; LL.D., College of Steubenville; LL.D., Drury College; H.H.D., Wheeling College.

JOHN J. KNIGHT, *Professor of Physical Education Emeritus.* (1930-1970). B.A., West Virginia Wesleyan College; M.A., Ohio State University; University of Michigan.

BRADFORD TYE, *Associate Professor of Mathematics Emeritus.* (1943-1973). B.S., Alma White College; M.S., New York University; Rutgers University; Columbia University; University of Pittsburgh.

GEORGE K. HAUPTFUEHRER, *Professor of Music Emeritus.* (1945-1977). B.A., B.M., Friends University; M.A., University of Kansas; Pittsburgh Musical Institute; Juilliard School of Music; Indiana University.

S. ELIZABETH REED, *Associate Professor of Physical Education Emeritus.* (1945-1975). B.A., Muskingum College; M.Ed., University of Pittsburgh; University of Wisconsin; New York University; University of Wyoming; University of Southern California; University of Michigan.

HELEN LOUISE McGUFFIE, *Professor of English Emeritus.* (1948-1983).

B.A., Bethany College; M.A., University of Pittsburgh; Ph.D., Columbia University; Oxford University.

MARGARET MATHISON, *Professor of Education Emeritus.* (1951-1974).

B.A., M.Litt., University of Pittsburgh; University of Southern California; Pennsylvania State University; Ohio State University.

J. DANIEL DRAPER, *Professor of Chemistry Emeritus.* (1951-1984). B.S., Franklin and Marshall College; Ph.D., University of Maryland; Michigan State University.

WINIFRED WEBSTER, *Dean of Women and Instructor in English Emeritus.* (1952-1960).

B.A., University of North Dakota; M.A., Columbia University.

PERRY E. GRESHAM, *President* (1953-1972) and *President Emeritus and Distinguished Professor.* (1972-).

B.A., B.D., Texas Christian University; LL.D., Texas Christian University; Litt.D., Culver-Stockton College; L.H.D., Chapman College; Ed.D., Transylvania University; University of Chicago; Columbia University; Litt.D., University of Cincinnati; Litt. D., Findlay College; Pd.D., Youngstown University; D.B.A., Lawrence Institute of Technology; H.H.D., Bethany College; J.D., William Woods College; Litt.D., West Virginia University; L.H.D., Concord College; Ed.D., Rio Grande College; LL.D., Alderson-Broadbush College; LL.D., Quincy College.

SUSAN W. HANNA, *Instructor in Health and Physical Education Emeritus.* (1957-1977).

B.A., Bethany College; Marjorie Webster School of Physical Education.

HSIOH-REN WEI, *Professor of Physics and Public Affairs Emeritus.* (1963-1972).

B.A., University of Nanking; Ph.D., University of Chicago.

THEODORE R. KIMPTON, *Assistant Professor of Foreign Languages Emeritus.* (1965-1974).

B.S., United States Military Academy; M.A., University of Maryland; Catholic University; Laval University.

WESLEY J. WAGNER, *Associate Professor of Art Emeritus.* (1967-1983). Pennsylvania Academy of Fine Arts; Barnes Foundation.

DOROTHY HUESTIS, *Assistant Professor of Education Emeritus.* (1969-1976).

B.A., M.A., Indiana University.

CHARLES E. HALT, *Professor of Economics Emeritus.* (1969-1977).

B.S., Slippery Rock State College; M.Ed., Pennsylvania State University; Ph.D., Syracuse University; University of Pittsburgh.

OLIVER MANNING, *Artist-in-Residence Emeritus.* (1972-1982).

B.M., Louisiana State College; M.M., Cincinnati College Conservatory of Music.

Professors

WILLIAM L. YOUNG, *Professor of History and Political Science and Head of the History Department.* (1950).

B.A., Bethany College; M.A., Ph.D., Ohio State University; Columbia University.

JOHN R. TAYLOR, *Professor of English.* (1955).

B.A., Bethany College; M.A., Princeton University; University of Akron; University of Kansas; University of Birmingham, England; University of Edinburgh; Oxford University.

JAMES W. CARTY, JR., *Professor of Communications*. (1959).
B.A., Culver-Stockton; B.D., University of Chicago; M.S., Northwestern University; D.D., Evangelical Seminary of Puerto Rico; University of Oklahoma; George Peabody College; Scaritt College; Saltillo (Mexico) State Teachers College; Diploma from National University of Nicaragua; Diploma from University of San Carlos; Ohio University; University of Denver; Universidad Iberoamericana.

RICHARD B. KENNEY, *T. W. Phillips Professor of Old Testament Literature and Head of the Department of Religious Studies*. (1964).

B.A., Washington University; B.D., M.A., Ph.D., Yale University; Basel University; McGill University; University of Tübingen; The University of Chicago.

ROBERT E. MYERS, *Professor of Philosophy and Head of the Department*. (1964).

B.A., Bethany College; M.Div., Texas Christian University; Ph.D., Ohio State University.

GARY E. LARSON, *Professor of Biology*. (1964).

B.S., M.S., New York State University, Albany; Ph.D., Rutgers University; Albany Medical College.

HIRAM J. LESTER, *Professor of Religious Studies*. (1965).

Johnson Bible College; B.A., B.D., Phillips University; M.A., Ph.D., Yale University.

JOHN U. DAVIS, *Professor of Education*. (1966).

B.A., Bethany College; M.A., Ed.D., Columbia University; University of Nebraska; Oxford University; West Virginia University.

DAVID J. JUDY, *Professor of English and Theatre and Head of the Fine and Applied Arts Department*. (1967).

B.A., Denison University; M.A., Western Reserve; Ph.D., West Virginia University; University of Mexico; Oxford University.

STANLEY L. BECKER, *Professor of Computer Science and Philosophy*. (1968).
B.S., New York State College of Forestry; Ph.D., University of Wisconsin.

J. TREVOR PEIRCE, *Professor of Psychology and Head of the Department*. (1969).

B.A., Princeton University; Ph.D., University of California.

ALBERT R. BUCKELEW, JR., *Professor of Biology and Head of the Department*. (1969).
B.S., Fairleigh Dickinson University; Ph.D., University of New Hampshire.

LARRY E. GRIMES, *Professor of English, Head of the Department, and Director of Liberal Studies*. (1970).

B.A., Bethany College; B.D., Yale Divinity School; Ph.D. Emory University.

LEONORA BALLA CAYARD, *Professor of Foreign Languages and Coordinator of International Education Programs*. (1970).
Ph.D., Marburg University; Yale University.

PAULINE R. NELSON, *Professor of Foreign Languages and Head of the Department*. (1971).

B.A., Upsala College; M.A., Ph.D., University of Pittsburgh.

DAVID T. BROWN, *Professor of Mathematics and Computer Science*. (1974).

B.A., Ottawa University; M.A., Ph.D., Syracuse University; University of Pittsburgh.

T. GALE THOMPSON, *Professor of Psychology*. (1974).

B.A., M.A., Ph.D., University of Missouri.

LYNN ADKINS, *Professor of Sociology and Social Work and Head of the Department*. (1978).

A.B., Marshall University; M.S.W., West Virginia University; Ph.D., University of Pittsburgh; London School of Economics and Social Science.

ANN C. SHELLY, *Professor of Education, Head of the Department, and Director of Teacher Preparation Programs*. (1978).
B.A., M.A., Ph.D., Michigan State University.

EDWIN GOLDIN, *Professor of Physics, Head of the Department, and Director of Academic Computing*. (1981).

B.A., Temple University, M.S., Ph.D., Polytechnic Institute of New York.

HAROLD C. SHAVER, *Professor of Communications and Head of the Department*. (1982).
B.A., Muskingum College; M.A., Ph.D., Syracuse University.

ALBERT J. OSSMAN, JR., *Professor of Politics and Public Policy, Head of the Department, and Director of Public Affairs Programs*. (1982).

A.B., M.A., Ph.D., Syracuse University.

Associate Professors

JAMES E. ALLISON, *Associate Professor of Mathematics and Head of the Department*. (1964).

B.S., Bethany College; M.A., West Virginia University; Texas Christian University.

JOHN W. LOZIER, *Associate Professor of History*. (1964).

B.A., University of Colorado; M.A., Ph.D., Ohio State University; Massachusetts Institute of Technology.

JOHN D. DAVIS, *Associate Professor of Economics and Business*. (1965).
B.A., American International College; M.A., University of Connecticut; West Virginia University; The University of Chicago.

W. RANDOLPH COOEY, *Associate Professor of Economics and Business*. (1966).
B.A., Bethany College; M.A., West Virginia University; Mississippi State University.

ANTHONY L. MITCH, *Associate Professor of English*. (1967).

B.A., Cornell University; M.A., St. John's University; New York University.

WALTER L. KORNOWSKI, *Associate Professor of Art*. (1967).

B.F.A., Rochester Institute of Technology; M.S., State University College of Buffalo; M.F.A., West Virginia University.

MILTON R. SMITH, JR., *Associate Professor of Chemistry*. (1972).

B.S., Sul Ross State University; Ph.D., Texas A & M University, Ohio State University.

JOHN H. HULL, *Associate Professor of Psychology*. (1976).

B.S., Alma College; M.A., Ph.D., Kent State University.

JACQUELINE DeLAAT, *Associate Professor of Political Science and Public Administration*. (1982).

B.A., The State University of Iowa; M.A., University of Minnesota; Ph.D., University of Pittsburgh.

JOHN R. MAIER, *Associate Professor of Foreign Languages*. (1984).

B.A., Ohio Wesleyan University, M.A., University of Minnesota; Ph.D., University of Wisconsin.

JOE M. LESEM, *Associate Professor of Communications*. (1985).

B.S., Southeast Missouri State University; M.A.J., University of Missouri.

Assistant Professors

ROBYN R. COLE, *Assistant Professor of English and Director of Writing and Developmental Studies*. (1968).

B.A., University of Maryland; M.A., University of Georgia; Ohio University; West Virginia University.

JOHN J. MCGOWAN, *Assistant Professor of Physical Education*. (1980).

B.S., Manhattan College; M.S., Springfield College.

MARC A. OLSHAN, *Assistant Professor of Sociology and Social Work*. (1981).

B.S., Cornell University; M.A., Columbia University; Ph.D., Cornell University.

HAROLD M. CURNUTTE, *Assistant Professor of Accounting*. (1981).

B.A., M.S., Ohio University.

I. HOWARD SEILER, *Assistant Professor of Education*. (1981).

B.A., M.A., Ph.D., Michigan State University.

WALLACE B. NEEL, *Assistant Professor of Physical Education*. (1982).

B.S., M.S., Ohio University.

MARY ELLEN KOMOROWSKI, *Assistant Professor of Mathematics and Education*. (1982).

B.A., M.A., Ed.D., West Virginia University; The American University of Beirut.

JAMES A. ZALACCA, *Assistant Professor of Physical Education*. (1982).

A.A.S., Genesee Community College; B.S., Brockport State University; M.A.T., DePauw University.

JAMES M. MEYER, *Assistant Professor of Physical Education*. (1982).

B.S., M.S., University of Akron.

RUSSELL J. COOK, *Assistant Professor of Communications and Director of Video and Media Services*. (1983).

B.F.A., M.A., Miami University.

ROBERT A. PAYSEN, *Assistant Professor of Chemistry*. (1983).

B.A., College of St. Thomas; Ph.D., University of Tennessee.

JONAS BARCIAUSKAS, *Head Librarian and Assistant Professor of Religious Studies*. (1984).

B.A., M.S.L.S., Columbia University; M.A., Pacific School of Religion; Ph.D., Fordham University.

KATHERINE S. CORAM, *Assistant Professor of Sociology and Social Work*. (1984).

B.A., Alderson-Broaddus College; M.S.W., West Virginia University.

MAJID A. SAWTARIE, *Assistant Professor of Physics and Computer Science*. (1985).

B.S., Lebanese University; M.S., M.S.C.S., Ph.D., Ohio University.

FUJIKO O. SAWTARIE, *Assistant Professor of Mathematics and Computer Science*. (1985).

B.S., Chubu Institute of Technology (Japan); M.S.E.E., M.S.C.S., Ohio University.

C. KENT CLINGER, *Assistant Professor of Chemistry*. (1985).

B.S., Oklahoma Christian College; B.B.S., Abilene Christian University; Ph.D., University of Texas.

JOHN T. BURNS, *Assistant Professor of Biology*. (1985).

B.A., Wabash College; M.S., Ph.D., Louisiana State University.

Instructors

DOUGLAS A. SWITZER, *Instructor in Communications*. (1984).

B.A., Muskingum College; M.A., Bowling Green State University.

JUDITH A. SODERLUND, *Instructor in Physical Education*. (1985).

B.S., Plymouth State College of the University of New Hampshire; M.S., Ithaca College.

Adjunct Faculty and Lecturers

WILLIAM B. ALLEN *Chaplain of the College.* (1970).

B.A., Bethany College; M.Div., Yale Divinity School, D.Min., School of Theology at Claremont.

RUTH L. WESTLAKE, *Lecturer in Communications.* (1975).

B.A., Kent State University; Ohio University.

DANIEL M. LOWY, *Lecturer in Religious Studies.* (1979).

A.B., New York University; M.H.L., Hebrew Union College (New York); D.D., Hebrew Union College (Cincinnati).

JENNIFER COFFIELD, *Lecturer in Theatre.* (1980).

B.F.A., West Virginia University; M.A., Southern Illinois University.

BETH DAMEIER, *Lecturer in Music.* (1983).
B.A., M.M.E., Wartburg College; M.A., University of Iowa.

TONI P. OLSHAN, *Reference Librarian and Lecturer in Library Science.* (1983).
B.S., M.S., Cornell University.

GARY KAPPEL, *Adjunct Instructor in Theatre and History.* (1983).

B.A., Bethany College; M.A., West Virginia University.

ROBERT J. FUNK, JR., *Adjunct Instructor in Fine and Applied Arts.* (1984).

A.S., Dean Junior College; B.A., Goddard College; M.F.A., University of Massachusetts.

MICHAEL A. POLASCIK, *Athletic Trainer and Lecturer in Physical Education.* (1985).

B.S., West Virginia University; M.S., Virginia Polytechnic Institute and State University.

ADVISORS

For Freshmen

Lynn Adkins

William B. Allen

James E. Allison

Albert R. Buckelew, Jr.

David T. Brown

Robyn R. Cole

Edwin Goldin

Larry E. Grimes

David J. Judy

Gary H. Kappel

Hiram J. Lester

John W. Lozier

John R. Maier

Marc A. Olshan

J. Trevor Peirce

Milton R. Smith, Jr.

John R. Taylor

T. Gale Thompson

For Fields of Concentration

Accounting Harold M. Curnutte

Biology Albert R. Buckelew, Jr.

Chemistry Milton R. Smith, Jr.

Communications Harold C. Shaver

Computer Science James E. Allison

Economics and Business John D. Davis

Education Ann C. Shelly

English Larry E. Grimes

Fine and Applied Arts David J. Judy

Foreign Languages Pauline R. Nelson

Health Science Gary E. Larson

History William L. Young

Interdisciplinary

Studies Larry E. Grimes

Mathematics James E. Allison

Philosophy Robert E. Myers

Physical Education John J. McGowan

Physics Edwin Goldin

Politics and

Public Policy Albert J. Ossman, Jr.

Psychology J. Trevor Peirce

Religious Studies Richard B. Kenney

Science Applications Edwin Goldin

Sociology and

Social Work Lynn Adkins

For Career Interests

Advertising James W. Carty, Jr.

Dentistry Gary E. Larson

Drama David J. Judy

Engineering Edwin Goldin

Law Albert J. Ossman, Jr.

Medicine Gary E. Larson

Ministry Richard B. Kenney

Newspaper Joe M. Lesem

Public Relations Harold C. Shaver

Radio Douglas A. Switzer

Recreation Leadership John J. McGowan

Social Work Lynn Adkins

Teaching Ann C. Shelly

Television Russell J. Cook

Veterinary Medicine Gary E. Larson

For Professional Core Program

Albert J. Ossman, Jr.

For Special Services

Campus Employment Gwendolyn Allen

Counseling Francesca Giordano

Foreign Students Gary E. Larson

Graduate Fellowships

and Scholarships Robert E. Myers

Ministerial Training

Awards Robert A. Sandercox

Social Security and

Veterans Benefits John C. Giesmann

Social and Recreational

Activities Darline B. Nicholson

Undergraduate

Scholarships Theodore W. Bunnell

Beth Dameier

Writing and

Developmental Studies Robyn R. Cole

Career Counseling Francesca Giordano

Gwendolyn Allen

FACULTY COMMITTEES

Student members are appointed annually to many of the following committees by the President of the College and upon the recommendation of the Student Board of Governors.

ADMISSION

James E. Allison, *Convener*; Lynn Adkins, John S. Cunningham, John D. Davis, David J. Judy, Richard B. Kenney, Milton R. Smith, Jr., Thomas H. Stein.

ATHLETICS

John U. Davis, *Convener*; John C. Giesmann, John McGowan, Judith A. Soderlund, Douglas A. Switzer.

CAMPUS MEDIA

Harold C. Shaver, *Convener*; James W. Carty, Jr., Russell J. Cook, John U. Davis, Kathy Faulkenberry, Walter L. Kornowski, Joseph M. Lesem, James M. Meyer, Robert O. Seidewitz, Douglas A. Switzer, John R. Taylor, Ruth L. Westlake.

CAREER ADVISEMENT

John S. Cunningham, *Convener*; Lynn Adkins, Gary E. Larson, Robert E. Myers, Darline B. Nicholson, Albert J. Ossman. **Graduate School:** Robert E. Myers, *Convener*; James Barciauskas, Stanley L. Becker, Robyn R. Cole, John R. Maier, Marc A. Olshan, Robert A. Paysen, **Health Professions:** Gary E. Larson, *Convener*; Albert R. Buckelew, Jr., J. Trevor Peirce, Milton R. Smith, Jr. **Pre-Law:** Albert J. Ossman, *Convener*; Leonora Balla Cayard, John D. Davis, Jacqueline DeLaat, John W. Lozier, Anthony L. Mitch, William L. Young. **Social Work:** Lynn Adkins, *Convener*; Katherine S. Coram, Marc A. Olshan, J. Trevor Peirce, Ann C. Shelly, James A. Zalacca.

COMPUTER ADVISORY

Edwin Goldin, *Convener*; James E. Allison, Stanley L. Becker, David T. Brown, Russell J. Cook, Harold M. Curnutte, Joseph M. Kurey, Anthony L. Mitch, Robert A. Paysen, J. Trevor Peirce, Lynn Queen, Fujiko O. Sawtarie, Majid A. Sawtarie, Robert O. Seidewitz, Milton R. Smith, Jr.

CURRICULUM

Wm. Daniel Cobb, *Convener*; James E. Allison, John C. Giesmann (*ex officio*), Edwin Goldin, Larry E. Grimes, Joseph M. Kurey, Anthony L. Mitch, Robert E. Myers, Albert J. Ossman, Harold C. Shaver, Ann C. Shelly.

EXTERNAL EDUCATION

Albert J. Ossman, *Convener*; William B. Allen, W. Randolph Cooley, Mary Ellen Komorowski, Joseph M. Kurey, Hiram J. Lester, Anthony L. Mitch, Wallace B. Neel, Darline B. Nicholson, Toni P. Olshan, Robert A. Sandercox, Ruth L. Westlake.

FACULTY BUDGET

Edwin Goldin, *Physical and Life Sciences* (1986); John R. Taylor, *Humanities* (1988); Harold C. Shaver, *Social Sciences* (1988); David J. Judy, *Representative to the Board of Trustees*; Albert J. Ossman, *At-Large* (1987).

FACULTY DEVELOPMENT

T. Gale Thompson, *Convener*; W. Randolph Cooley, Russell J. Cook, Harold M. Curnutte, Jacqueline DeLaat, John J. McGowan, Pauline R. Nelson, Marc A. Olshan, I. Howard Seiler.

FACULTY PERSONNEL

James E. Allison, *Physical and Life Sciences* (1987), *Convener*; David J. Judy *Humanities* (1986); John H. Hull, *At-Large* (1986); Pauline R. Nelson, *At-Large* (1988).

FACULTY WELFARE

Leonora Balla Cayard (1986), *Covener*; John H. Hull (1987), Marc A. Olshan (1988), T. Gale Thompson (1988).

GANS AWARD

Milton R. Smith, Jr., *Convener*; Albert R. Buckelew, C. Kent Clinger, Edwin Goldin, John H. Hull, Gary E. Larson, Robert A. Paysen, J. Trevor Peirce.

HONORS

Robert E. Myers, *Convener*; James W. Carty, Jr., John S. Cunningham, Richard B. Kenney, Darline B. Nicholson, Robert A. Sandercox, Ann C. Shelly, John R. Taylor, T. Gale Thompson, William L. Young.

INTERDISCIPLINARY STUDIES

Larry E. Grimes, *Convener*; James E. Allison, Jonas Barciauskas, Stanley L. Becker, Jacqueline DeLaat, Hiram J. Lester, Marc A. Olshan, Robert A. Paysen, T. Gale Thompson.

INTERNATIONAL EDUCATION

Leonora Balla Cayard, *Convener*; James W. Carty, Jr., W. Randolph Cooley, Mary Ellen Komorowski, Gary E. Larson, John W. Lozier, John R. Maier, Pauline R. Nelson, Albert J. Ossman, William L. Young.

POLICY APPEALS

Wm. Daniel Cobb, *Convener*; Albert R. Buckelew, Jr., Leonora Balla Cayard, John S. Cunningham, John D. Davis, John C. Giesmann, Richard B. Kenney, Joseph M. Kurey, John J. McGowan, Darline B. Nicholson, I. Howard Seiler.

PRACTICUM REVIEW

John H. Hull, *Convener*; Albert R. Buckelew, Jr., Leonora Balla Cayard, Larry E. Grimes, David J. Judy, Hiram J. Lester, John J. McGowan, Pauline R. Nelson, Harold C. Shaver, T. Gale Thompson.

RELIGIOUS LIFE

John H. Hull, *Convener*; William B. Allen, Jonas Barciauskas, James W. Carty, Jr., John C. Giesmann, Richard B. Kenney, Mary Ellen Komorowski, Robert E. Myers, Wallace B. Neel, John R. Taylor.

STUDENT LIFE

John S. Cunningham, *Convener*; Harold M. Curnutte, Robyn R. Cole, Katherine S. Coram, Walter L. Kornowski, John W. Lozier, James M. Meyer, Wallace B. Neel, I. Howard Seiler, James A. Zalacca; (*ex officio*): Theodore W. Bunnell, John C. Giesmann, Larry E. Grimes, Toni P. Olshan, Darline B. Nicholson, Christine Ossman, Joanne Sykes.

TEACHER EDUCATION

Ann C. Shelly, *Convener*; Lynn Adkins, David T. Brown, Albert R. Buckelew, Jr., John U. Davis, Jacqueline DeLaat, David J. Judy, Mary Ellen Komorowski, Pauline R. Nelson, I. Howard Seiler.

COLLEGE COUNCIL AND FACULTY SENATE

The College Council advises the President of the College on matters of student relations and the impact of policies and practices on student life. Its membership is comprised of senior administration and faculty who are designated by the President, and of presidents of fraternities, sororities and house associations. The Executive Dean for Student Affairs chairs the Council.

The Faculty Senate discuss issues regarding the educational programs of the College and advises the President of academic concerns. Membership includes all department heads, full professors, executive officers, and three elected faculty members. Elected members for 1985-1986 are *Katherine S. Coram, John R. Maier* and *Robert A. Paysen*. The Dean of the Faculty chairs the Senate.

Index

A

Academic Advisor	23
Academic Common Market	24
Academic Computer Center	27
Academic Procedures	39
Academic Programs	19
Accounting Courses	45
Accreditation	7
Achievement Recognition	33
Adjunct Faculty	117
Administration	113
Admission	11
Advanced Placement	12
Advisors	117
Aid	15
Alumni Council Membership	112
Alumni Field House	27
Application	11, 12
Application Fee	13
Art Courses	72
Assets of the College	26
Assistant Professors	116
Associate Professors	115
Astronomy	46
Athletics	31
Attendance Policy	40
Awards	35

B

Benedum Commons	27
Bethany House	27
Bethany Profile	5
Biology Courses	47
Board, Cost of	15
Board of Trustees	111
Breakage Deposit	16
Business and Economics Courses	56

C

Calendar	2
Campus Map	8, 9
Career and Professional Development	24
Career Interest Advisors	117
Center for Academic Computing	27
Change of Schedule	40
Change in Regulations	41
Chemistry Courses	49
Chief Business Officer	113
Christian Church (Disciples of Christ)	5
Classification of Students	40
Class Attendance Policy	40
Cochran Hall	26
College Life	29
College Council	118
Commencement Hall	26
Committees, Board of Trustees	112
Committees, Faculty	118
Communications Courses	51
Communications Design Courses	53
Community College Graduates	11
Comprehensive Charges	15
Comprehensive Examinations	22
Computer Science Courses	54
Course Descriptions	43
Course Load	39
Course Offerings	39
Course Index	42
Cramblet Hall	26
Cross-Listed Courses	39

D

Dean of Faculty	113
Dean of Leadership Center	113
Dean of Student Affairs	113
Dean of Student Life	113
Dean's List	33
Degrees	20
Design Courses	73
Directories	111

E

Early Admission	12
Economics and Business Courses	56
Educational Resources	26
Education Courses, Programs	59
Emeriti Faculty	114
Endowment Funds	26
English Courses	67
Expenses	15
External Programs	25

F

Faculty	114
Faculty Committees	118
Faculty Senate	118
Fees, Special	16
Field of Concentration	20
Field of Concentration Advisors	117
Financial Aid	15
Fine and Applied Arts Courses	72
Fine and Applied Arts Fees	16
Foreign Language Courses	75, 78
Foreign Students	13
Founding of the College	5
Fraternal Life	29
French Courses	75
Freshman Advisors	117
Freshman Interdisciplinary Lecture	23, 43
Freshman Program	23
Freshman Seminars	23, 44
Freshman Studies Courses	44

G

General Sciences	79
Geography	79
German Courses	76
Goals of the College	6
Grace Phillips Johnson Visual Arts Center	26
Grading System	39
Graduation Honors	33
Graphics, Communication Design Courses	73, 79
Greek Courses	78
Gresham House	27

H

Harder Hall	27
Health Insurance, Cost of	15
Health Science	80
Heuristics	80
History Courses	81
Honorary Trustees	112
Honor Societies	34

I	
Independent Study	39
Instructors	117
Intercollegiate Athletics	31
Interdisciplinary Studies	
Courses	84
Intramurals	31
Invalidation of Credits	41

J	
January Term	2

L	
Leadership Center	27
Lecturers	117
Leisure Studies	91
Library	27, 85
Literary Studies	76, 78

M	
Madrid Study Program	25
Map of the Campus	8, 9
Mathematics Courses	86
Matriculation Fee	13
Media Center	27
Media, Student	30
Memberships, College	7
Millsop Center	27
Music Courses	73

N	
Natatorium	27

O	
Oglebay Hall	26
Old Main	26
Overseas Program Fees	16
Overseas Study Offerings	25
Oxford Study Program	25

P	
Paris Sorbonne Program	25
Payment of Student Accounts	17
Payment Plans	17
Pendleton Heights	27
Perspectives Program	21
Phillips Hall	29
Phillips Library	27
Philosophy Courses	88
Physical Education Courses	90
Physics Courses	95
Policy Appeals Board	41
Politics and Public Policy	
Courses	98
Practicum Program	23
Pre-Professional Study	
Programs	19
President	113
Probation	40
Professional Core Advisors	117
Professional Core Program	19, 43
Professional Education	60
Professors	114
Provost for College	
Advancement	113
Psychology Courses	100
Publications, Student	30

R	
Readmission	13
Recognition Awards	33
Recreation	31
Refunds	17
Registration Deposit	13
Regulation Changes	41
Religious Life	30
Religious Studies Courses	103
Renner Union	27
Requirements for Degree	20
Residence Life	29
Residence Requirement	23
Richardson Hall of Science	26
Room, Cost of	15

S	
Scholarships	33
Science Applications	106
Senior Comprehensive	
Examinations	22
Senior Fellowships	33
Senior Project	22
Social Life	29
Social Sciences	106
Social Work Courses	109
Sociology Courses	108
Spanish Courses	77
Special Education	66
Special Examinations	40
Special Fees	16
Special Services Advisors	117
State Government Study	24
Steinman Fine Arts Center	26
Student Board of Governors	29
Student Drawing Account	17
Student Government	29
Student Health Services	31
Student Life	29
Student Regulations	30

T	
Theatre Courses	74
Three-Dimensional Art	73
Transcript of Records	41
Transfers	11
Treasurer	113
Tubingen Study Program	25
Tuition	15
Two-Dimensional Art	73

V	
Visiting Bethany	12

W	
Washington Semester	24
Withdrawals	17, 41
Work Internships	24
Writing Proficiency	
Requirement	23

Notice of Nondiscrimination Policy
Bethany College admits students of any race, color, sex, religion, handicaps, and national or ethnic origin to all of the rights, privileges, programs and activities generally accorded or made available to students at the school. Bethany does not discriminate on the basis of race, color, sex, religion, and national or ethnic origin in the administration of its educational policies, scholarship and loan programs, athletic activities or other school-administered programs.

Bethany

College Bulletin 1986-1988



August 1986



Bethany College Bulletin 1986-1988

Table of Contents

Bethany Profile	5
Admission to the College	11
Expenses, Aid	15
Academic Programs	19
College, Student Life	29
Scholarships, Recognition	
Awards	33
Academic Procedures	39
Course Descriptions	43
The Directories	111
Index	119

The information in this Bulletin applies to the 1986-1987 academic year only. Any changes for 1987-1988 will be published in a supplement to this volume that will be available in August, 1987.

Vol. LXXIX No. 3
August 1986
(USPS 052-420)

Second class postage paid at Bethany, West Virginia 26032. Published five times a year, February, April, July, August and October by Bethany College, Bethany, West Virginia.

College Calendar 1986-1987

The Bethany calendar consists of two 15-week semesters and a four-week voluntary interim session in January. The fall semester is from September to before Christmas. The spring semester is from February through May. Some courses are offered over the full semester while others are for the first or second half of a semester. This division provides flexibility for students to do off-campus study and internships.

The four weeks in January are an opportunity for students to elect for use in intensive study on campus or for off-campus work. Two five-week summer terms and an 11-week summer independent study period are offered.

First Semester

August
30-31 Saturday-Sunday
Orientation and evaluation for new students

September
1 Monday
Registration
2 Tuesday
Classes begin for all students
8 Monday
Last day for re-adjustment of schedules without academic and financial penalty; last day to add a course
11 Thursday
Formal Convocation
15 Monday
Last day to determine credit/no credit

October
18 Saturday
Homecoming
20 Monday
Last day of classes for first-half of semester
20-21 Monday-Tuesday
Final exams for first-half semester courses
24 Friday
NO CLASSES; mid-term grades are due
27 Monday
Writing Qualification Test for Freshman Seminars

November
1 Saturday
Parents' Day
8 Saturday
Board of Trustees Meeting
17-21 Monday-Friday
Registration for second semester
21 Friday 4 p.m.
Thanksgiving vacation begins

December
1 Monday 8 a.m.
Thanksgiving vacation ends
16 Tuesday
Last day of first-semester classes
17 Wednesday
Reading Day
18-20 Thursday-Saturday
Final exam period
22 Monday
Final grades are due

January Term (January 5-30)

January
26-27 Monday-Tuesday
Senior Comprehensive Exams (Written)
28-31 Wednesday-Saturday
Senior Comprehensive Exams (Oral)

Second Semester

February
1 Sunday
Registration for all students and Diagnostic Writing Test for all transfers and readmissions
2 Monday
Classes begin for all students
6 Friday
Last day for re-adjustment of schedules without academic and financial penalty; last day to add a course
12 Thursday
Formal Convocation
13 Friday
Last day to determine credit/no credit

March
5 Thursday
Founder's Day
12 Thursday
Writing Qualification Test (Sophomores and Juniors)
18-19 Wednesday-Thursday
Final exams for first-half semester courses
20 Friday
Last day of classes for first-half semester courses
20 Friday 4 p.m.
Spring vacation begins
24 Tuesday
Mid-term grades are due
30 Monday, 8 a.m.
Spring vacation ends

April
23 Thursday
Honors Day
April 27-May 1 Monday-Friday
Registration for first semester 1987-88

May
2 Saturday 8 a.m.
Reading period for seniors
4 Monday
Grades due for students taking Comprehensives
11-12 Monday-Tuesday
Senior Comprehensives (Written)
13-16 Wednesday-Saturday
Senior Comprehensives (Oral)
15 Friday
Grades due for graduating seniors who took Comprehensives in January and last day of classes
16 Saturday
Alumni Day
18-20 Monday-Wednesday
Final exam period
21 Thursday
Final Faculty meeting
22 Friday
Board of Trustees meeting
22 Friday 8 p.m.
Baccalaureate Service
23 Saturday 10 a.m.
Commencement
25 Monday
Final grades are due

College Calendar 1987-1988

The 1987-1988 calendar is tentative. An official calendar will be printed in the August, 1987, supplement to this Bulletin.

First Semester

August

Aug. 29-30 Saturday-Sunday

Orientation and evaluation for new students

31 Monday

Registration

September

1 Tuesday

Classes begin for all students

7 Monday

Last day for re-adjustment of schedules without academic and financial penalty; last day to add a course

10 Thursday

Formal Convocation

14 Monday

Last day to determine credit/no credit

October

10 Saturday

Homecoming

19 Monday

Last day of classes for first-half of semester

19-20 Monday-Tuesday

Final exams for first-half semester courses

23 Friday

NO CLASSES; mid-term grades are due

24 Saturday

Parents' Day

26 Monday

Writing Qualification Test for Freshman Seminars

November

7 Saturday

Board of Trustees Meeting

16-20 Monday-Friday

Registration for second semester

20 Friday 4 p.m.

Thanksgiving vacation begins

30 Monday 8 a.m.

Thanksgiving vacation ends

December

15 Tuesday

Last day of first-semester classes

16 Wednesday

Reading Day

17-19 Thursday-Saturday

Final exam period

21 Monday

Final grades are due

January Term (January 4-29)

January

25-26 Monday-Tuesday

Senior Comprehensive Exams (Written)

27-30 Wednesday-Saturday

Senior Comprehensive Exams (Oral)

Second Semester

January

31 Sunday

Registration for all students and Diagnostic

Writing Test for all transfers and readmissions

February

1 Monday

Classes begin for all students

5 Friday

Last day for re-adjustment of schedules without academic and financial penalty; last day to add a course

11 Thursday

Formal Convocation

12 Friday

Last day to determine credit/no credit

March

3 Thursday

Founder's Day

10 Thursday

Writing Qualification Test (Sophomores and Juniors)

16-17 Wednesday-Thursday

Final exams for first-half semester courses

18 Friday

Last day of classes for first-half semester courses

18 Friday 4 p.m.

Spring vacation begins

22 Tuesday

Mid-term grades are due

28 Monday 8 a.m.

Spring vacation ends

April

21 Thursday

Honors Day

25-29 Monday-Friday

Registration for first semester 1988-89

30 Saturday 8 a.m.

Reading period for Seniors

May

2 Monday

Grades due for seniors taking Comprehensives

9-10 Monday-Tuesday

Senior Comprehensives (Written)

11-14 Wednesday-Saturday

Senior Comprehensives (Oral)

13 Friday

Grades due for graduating seniors who took Comprehensives in January and last day of classes

14 Saturday

Alumni Day

16-28 Monday-Wednesday

Final exam period

19 Thursday

Final Faculty meeting

20 Friday

Board of Trustees meeting

20 Friday 8 p.m.

Baccalaureate Service

21 Saturday 10 a.m.

Commencement

23 Monday

Final grades are due



Bethany Profile

Bethany College, nearly 150 years old, is a highly contemporary institution based in the tradition of the liberal arts.

The College offers a wide array of studies and awards bachelor of science or bachelor of arts degrees in the fields of Accounting, Biology, Chemistry, Communications, Computer Science, Economics and Business, Education, English, Fine and Applied Arts, French, German, Health Science, History, Interdisciplinary Studies, Mathematics, Philosophy, Physical Education, Physics, Politics and Public Policy, Psychology, Religious Studies, Science Applications, Spanish, Sociology and Social Work.

In addition, pre-professional education is available in chemistry, dentistry, engineering, law, medicine, public administration, theology, and veterinary medicine.

The College's program of liberal education prepares students for a lifetime of work and a life of significance. Bethany places particular emphasis upon the leadership development and broad areas of communications, management, public policy and administration, and science and technology.



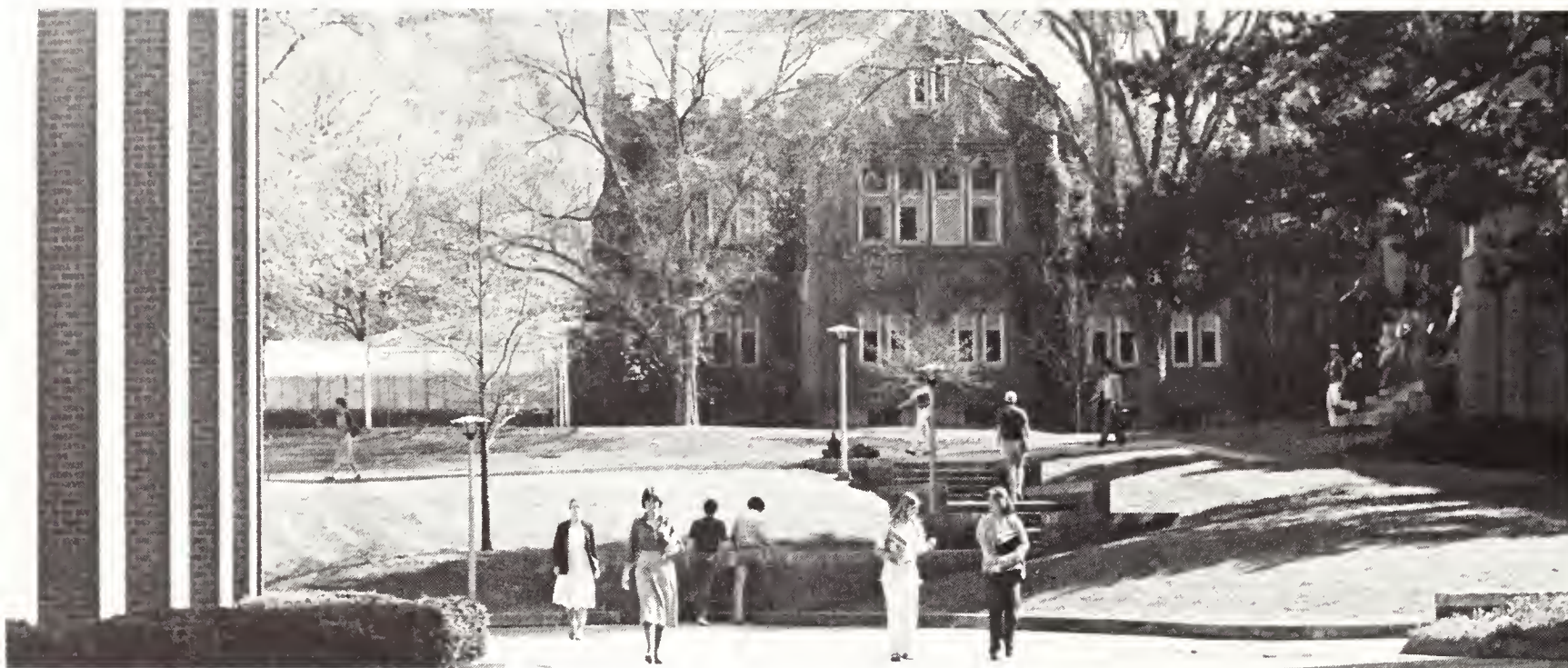
Bethany has excellent facilities to support the traditional offerings and its emphases, and integrates today's technology in its general education program. As one example, computing, a central feature in many academic disciplines, is offered as a field of concentration (major), and is an emphasis for the coming decade. The College's Center for Academic Computing has been enhanced with the recent addition of a visual arts center featuring up-to-date computer graphics equipment.

Bethany was founded March 2, 1840, by Alexander Campbell, educator, celebrated debater and Christian reformer who provided land and funds for the first building and served as first president.

Since its inception, Bethany has remained a four-year private liberal arts college affiliated with the Christian Church (Disciples of Christ). This religious body, of which Campbell was one of the principal founders, continues to support and encourage Bethany, though it exercises no sectarian control. Students of virtually every religious communion have been welcomed to the College.

Bethany is located in the northern panhandle of West Virginia in the foothills of the Allegheny Mountains. Pittsburgh is 48 miles to the northeast. Wheeling, W. Va., and Washington, Pa., are each a half-hour drive from the 1,600-acre campus.

Bethany students, approximately 800, represent nearly 30 states and nine foreign countries. Typically, one third is from the East coast and the New England states. Another third represents the Mid-Atlantic Region, while the remaining one-third is from other states and countries.



Goals

Bethany College is a private, four-year, church-related but autonomous, co-educational, residential, liberal arts college with a tradition of innovative and quality educational programs.

Bethany emphasizes critical reason and the religious dimensions of life, community experience and the importance of the individual, ethical responsibility and the satisfaction of

personal accomplishments, the integration of the total person and the value of a life of work and service to others.

The Bethany education program is designed to help each Bethany student realize leadership potential, intellectual skills and moral capacities in the accomplishment of these goals:

- to discover how to acquire, evaluate and use knowledge
- to master the skills of communication
- to cooperate and collaborate with others in study, analysis and formulation of solutions to problems
- to understand contemporary issues and events
- to analyze personal values, to perceive and to deal sympathetically with the values of others, and to be open to the continued evaluation of both
- to make progress toward the selection of and the preparation for a vocation
- to integrate the various experiences of life and to see the relationship of the college experience to future development as a responsible citizen.





Accreditation, Memberships

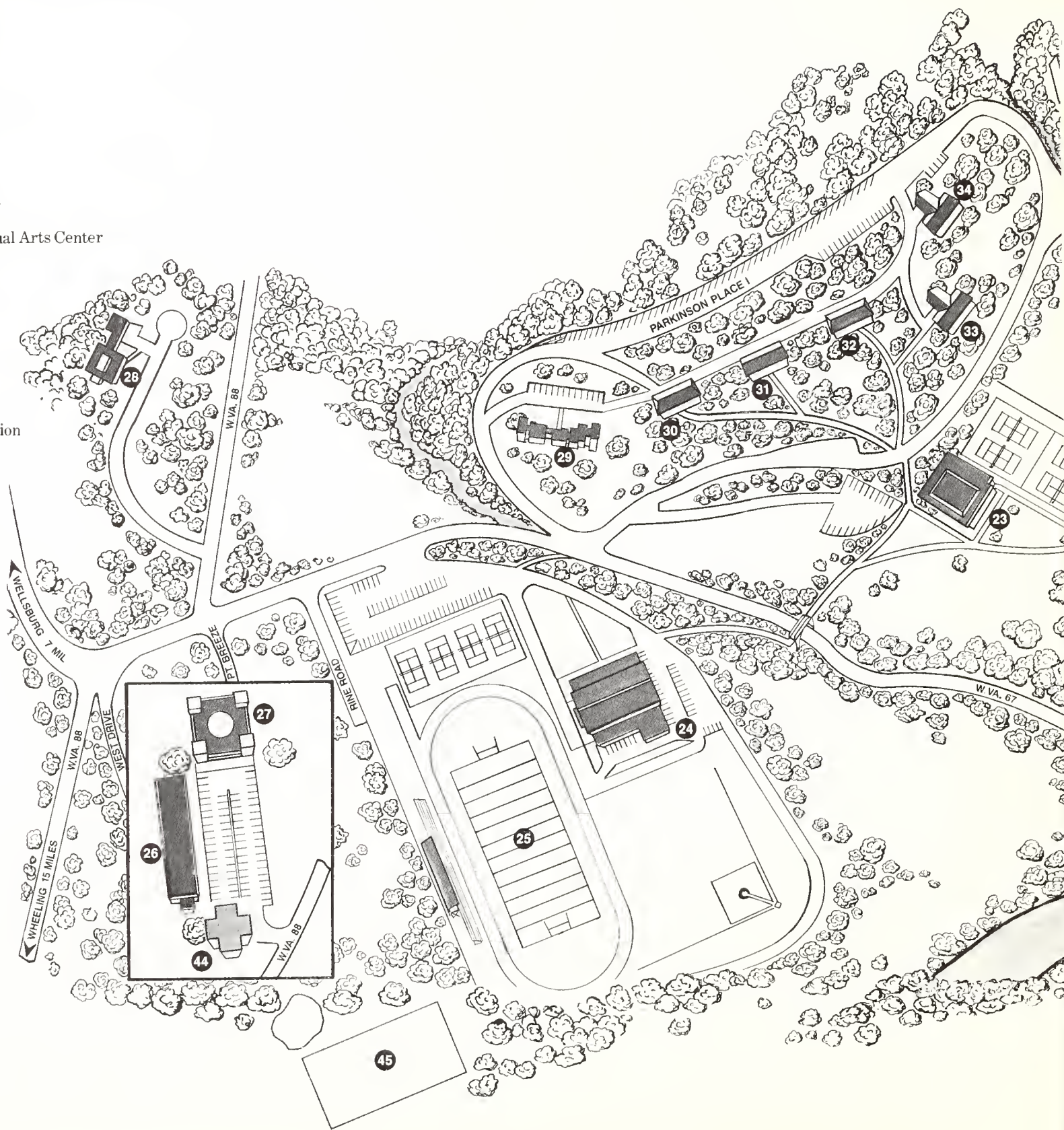
Bethany College is accredited by or holds memberships in:

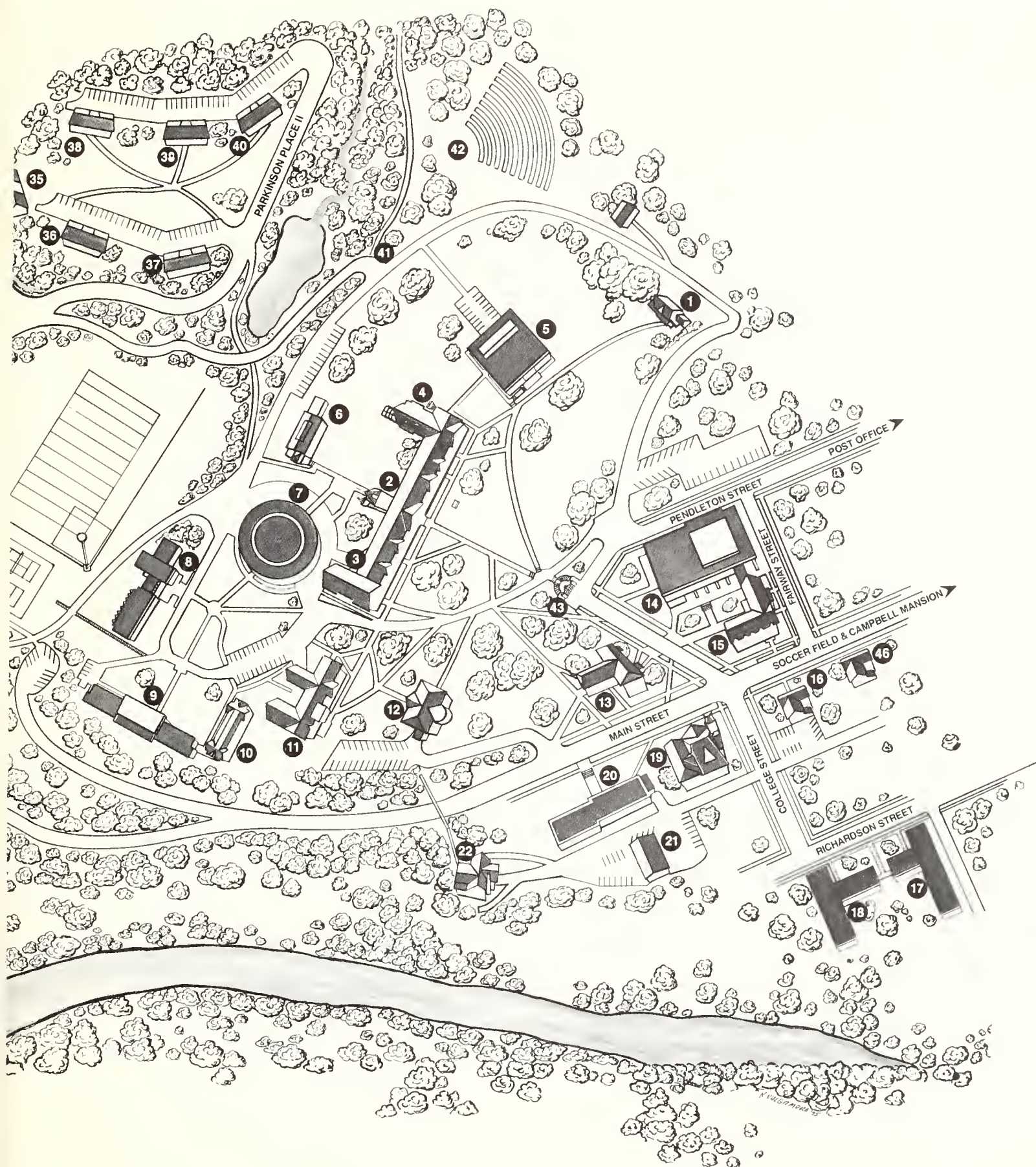
- North Central Association of Colleges and Secondary Schools
- Association of American Colleges
- American Council on Education
- American Association for Higher Education
- College Entrance Examination Board
- Council on Social Work Education
- American Association of Colleges for Teacher Education
- National Council for the Accreditation of Teacher Education
- Council of Independent Colleges
- Division of Higher Education of the Christian Church (Disciples of Christ)
- Women graduates are eligible for membership in the American Association of University Women



Bethany

1. Pendleton Heights
2. Old Main
3. Commencement Hall
4. Oglebay Hall
5. Steinman Fine Arts Center
Wailes Theater
6. Grace Phillips Johnson Visual Arts Center
7. Richardson Hall of Science
Weimer Lecture Hall
8. Phillips Memorial Library
9. Morlan Hall
10. Harlan Hall
11. Phillips Hall
Renner Too
Maxwell's
12. Cramblet Hall
13. Cochran Hall
14. Benedum Commons
15. Bethany House-Renner Union
Bookstore
Admission Office
16. Infirmary
17. McEachern Hall
18. McLean Hall
19. Bethany Memorial Church
20. Campbell Hall
21. Physical Plant
22. Heating Plant
23. Knight Natatorium
24. Alumni Field House
25. Rine Field
26. Gresham House
27. Leadership Center
28. Highland Hearth
29. Faculty Apartments
30. Clark House
31. Hagerman House
32. McDiarmid House
33. Goodnight House
34. Woolery House
35. Zeta Tau Alpha
36. Heritage House
37. Alpha Xi Delta
38. Phi Kappa Tau
39. Kappa Delta
40. Phi Mu
41. Weimer Nature Trail
42. Amphitheater
43. Oglebay Gates
44. Harder Hall
45. Athletic Field
46. Delta Tau Delta
Founder's House







Admission

Application

Bethany welcomes applications for admission from candidates who feel they would contribute to and benefit from a Bethany education. Admission is based on a careful review of all credentials presented by the candidate. The Committee on Admission accepts candidates it considers best qualified among those applying. In no case does the meeting of minimum standards assure admission. Acceptance is contingent upon a candidate's successful completion of secondary school.

The College seeks students who have prepared themselves for a liberal arts curriculum by taking at least 15 units of college-preparatory work. Although the College does not absolutely prescribe how these units should be distributed, it encourages a minimum of four years of English, three years of mathematics, three years of science, three years of social science and at least two years of a foreign language. For students who have developed individual curricula or are involved in experimental honors programs, the Committee on Admission makes special evaluation.



The application process includes furnishing a transcript of completed work, a personal file, two references, and either the College Entrance Examination Board Scholastic Aptitude Test (SAT) scores or the American College Testing Program (ACT) scores. Supporting documents that might be of help in the process of admission, that is poetry, plays, short stories, music, artwork, photography, and journalistic writings, may also be submitted.

Bethany's admission policy enables the Committee on Admission to act on completed applications as they are received. Applicants will be notified of the Committee's decision approximately three weeks after all credentials have been received. Early application is advised.

Transfers

Transfer students are welcome. Procedures for transferring to Bethany are similar to those for admission of freshmen. Any student in good standing at a fully accredited institution of higher education is eligible for acceptance. A majority of students accepted as transfers have above average grades and are seeking a campus life unlike that which they have experienced.

Grades of "C" or better are accepted along with course work in which credit (on a credit/no credit basis) or pass (in a pass/fail system) has been received. If requested, course work from other institutions will be reviewed by Bethany's registrar prior to making application.

Community/Junior College Graduates

Students who have received or will receive an Associate in Arts or Associate in Science Degree and find Bethany's curriculum suited to their educational goals are cordially encouraged to apply.

Holders of the A.A./A.S. Degree who are accepted receive at least two years (minimum 60 hours) credit, enter as juniors, and receive all the rights and privileges of upperclass students.

The College will make every effort to assist holders of Associate degrees to complete their baccalaureate programs within two years at Bethany. However, some fields of concentration may require more than 68 additional hours beyond the 60 referred to above, depending on the type of Associate's program the student has completed.

Early Admission

Some students complete their secondary school graduation requirements a year early and decide to pursue college admission after their junior year. For those who have demonstrated maturity and show evidence of a strong academic background, Bethany offers a program for early admission. For this type of admission, the usual admission procedures must be followed. A personal interview on campus as well as a discussion between the student's college counselor and a Bethany admission officer are required.

Advanced Placement

Students may receive advanced placement and/or credit from any department in the College through a testing program. This must be accomplished before the end of the first year at Bethany College. Those who wish to receive credit by examination should consult with the Office of Career and Professional Development and the appropriate department head.

Credit may be received for courses waived as a result of high scores on the College Entrance Examination Board Testing Program for Advanced Placement. The waiving of courses or granting of credit, however, are departmental matters and require consultation with the appropriate department head upon matriculation.

Visiting Bethany

Although not required, an on-campus interview with an admission officer is highly recommended. A campus visit will enable the student to develop some understanding of the College and its expectations. A comprehensive tour, observation of classes, and interaction with Bethany students and faculty are available upon request.

Prospective students are also invited to remain overnight as the guest of a Bethany student. Meals and overnight accommodations in college housing for prospective students are provided by the College. Lodging for parents is available on campus at Gresham House, as well as nearby lodges and motels. Transportation arrangements from the Greater Pittsburgh International Airport, as well as from the Pittsburgh rail and bus terminals, may be arranged through the Admission Office.

The Admission Office is open Monday through Friday from 9 a.m. to 4 p.m. and Saturday from 9 a.m. to 1 p.m. throughout the year. Appointments may be made by calling 304-829-7611 or by writing the Admission Office, Bethany College, Bethany, West Virginia 26032. Three days advance notice is requested to make proper arrangements.

Information on admission and registration fees, as well as details on expenses, aid and scholarships are on Pages 12-17 and 33-37.



Foreign Students

Bethany is pleased to receive applications from students of other countries. Approximately 10 countries are represented on campus each year.

Students from non-English-speaking countries are required to submit, along with an application for admission, a complete secondary school transcript, the results of either the American College Testing Program (ACT) or the College Entrance Examination Board Scholastic Aptitude Test (SAT) and the Test of English as a Foreign Language (TOEFL), and at least two letters of recommendation. Applicants for the Fall Semester must submit the above stated materials by February 1.

Foreign students are also requested to complete a Foreign Student's Financial Aid Application and Declaration. This form is to be returned with admission materials by the deadlines mentioned. Although Bethany is willing to review requests for financial assistance, funds are limited.

Application for Admission

A non-refundable \$15 fee is required at the time of formal application.

Application for Readmission

Students previously enrolled in Bethany College who wish to return for additional work must file an Application for Readmission with the Registrar's Office. A \$5 fee is required at the time such application is made.



Registration Deposit

Upon acceptance for admission or readmission, a \$100 registration deposit is required of all students. Once this deposit is paid it is not refunded until after graduation or until a Bethany student completes the following procedure:

Students not being graduated may have the deposit refunded after the last term of their attendance if written notice is given to the Business Office prior to the advance enrollment date for the next

regular term. Such students may be readmitted by approval of the Dean of Students and the Business Manager.

Matriculation Fee

A \$20 fee, payable once by every new student, covers, in part, the cost of orientation and evaluation procedures for new students.



Expenses, Aid

Bethany College is a non-profit institution. Tuition, fees and other general charges paid by the student cover approximately two-thirds of the College's instructional and operational expenses. The remainder comes from income from endowment funds and from gifts and contributions. Bethany continues to keep costs as low as possible.

Charges and fees stated on the following pages apply only to 1986-1987. Charges and fees for 1987-1988 will be published in the August, 1987, supplement to this Bulletin.

Comprehensive Charges

Comprehensive charges for the 1986-1987 year at Bethany include the following:

Tuition and Fees	\$7,610
Room (Double Occupancy)	\$1,040
Board	\$1,660
Student Board of Governors	\$160
Bethany House-Benedum Commons	\$70

While a general charge is stated for Tuition and Fees, this fee may be divided into \$6,960 for tuition and \$650 for the following activities and services: athletics, health service, library, lectures, plays, concerts, publications, student activities, and laboratory services with the exception of music and art.

The Bethany House-Benedum Commons Fee is charged to all registered students and covers the operation and maintenance costs of the student union.

No reduction is made in student accounts for course changes made after the first two weeks of the semester. The College is required to collect a three per cent West Virginia sales tax on published charges for room and parking permits. Bethany reserves the right to change, without advance notice, the price for room, board and health insurance.

Financial Aid

Bethany believes that the funding of a student's education is primarily a family responsibility. However, financial assistance is available to those students whose resources will not fund a Bethany education and yet sincerely desire to attend. Outstanding students, regardless of demonstrated need, frequently receive scholarships and grants to attend the College. Several programs are available to such students. Inquiries are encouraged.

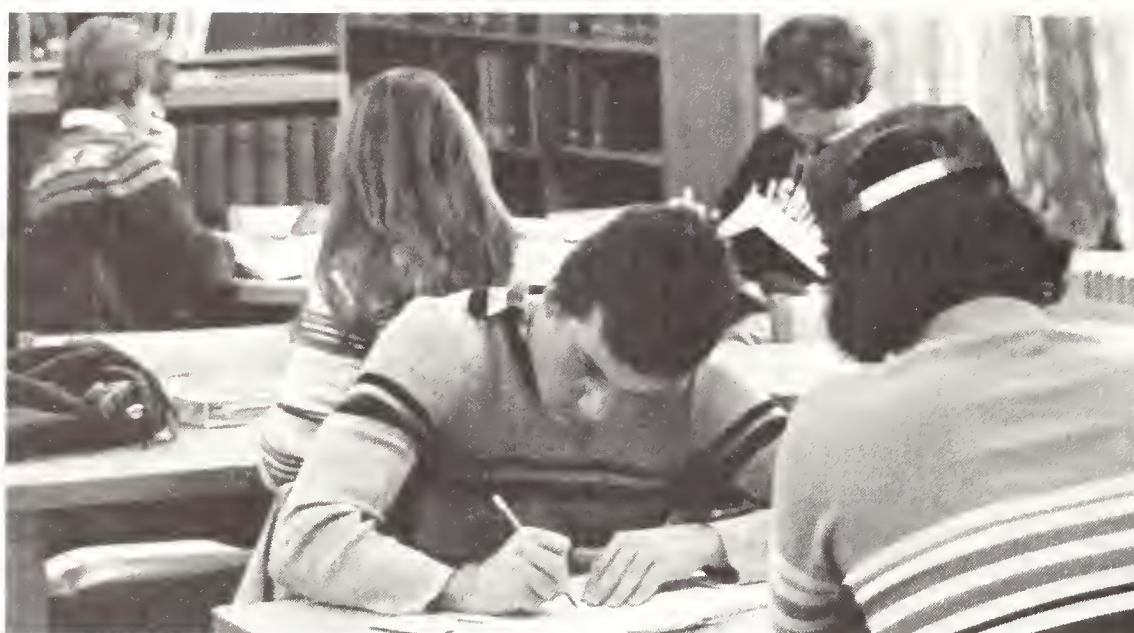
All need-based aid is awarded through careful evaluation of the Financial Aid Form (FAF), available from the student's guidance counselor. Designation of Bethany College as an institution to receive the processed information is required. All applicants for admission to Bethany are sent detailed information and instructions regarding the financial aid application and awarding processes, normally beginning in December.

Because of the large number of applications for financial aid, assignment of funds is made according to the date applications are processed, with April 1 established as the priority deadline for all new students. The earlier a student completes all admission materials and all financial aid materials, the faster the student will be awarded financial aid. However, the



FAF must not be completed until after January 1 as it also serves as an application for the Pell Grant Program.

A financial-aid applicant whose need for assistance has been verified by the College Scholarship Service will have his or her need met through a variety of financial aids, including scholarships, grants, loans, and College employment. The student has the option of accepting any or all of the aid offered. An interview with an officer of the College once the offer of assistance has been made can help to explain any problems. The Admission Office or the Financial Aid Office helps to arrange these interviews.



Infirmary charge per day (after the first three days each semester)	\$5
Late registration (per day)	\$3
Automobile Registration	\$20
Sickness Insurance	\$85

Fine and Applied Arts Fees

FAA 201	\$5
FAA 210	\$25
FAA 303	\$15
FAA 304	\$15
FAA 310	\$15
FAA 320	\$15
FAA 404	\$15
FAA 405	\$15
FAA 406	\$15
FAA 420	\$15
FAA 425	\$20

Fine and Applied Arts fees will also be required for independent study and studio courses where departmental materials are being used.

Private music lessons, two weekly \$145 per semester. Private music lesson, one weekly \$80 per semester.

Organ practice, one hour daily

\$35 per semester

Instrument Rental

\$10 per semester

Piano Practice, one hour daily

\$10 per semester

Voice Practice, one or two hours daily

\$10 per semester

Breakage Deposit

Chemistry and physics breakage deposits are covered by a \$10 breakage card which the student purchases each semester for every laboratory course in which the student is enrolled. In the event breakage exceeds \$10, an additional \$10 breakage card must be purchased. Unused portions are refunded at the end of each academic year.

Fees for Overseas Programs

Oxford:
\$5,320 for one semester for tuition and fees, room and board and activity fees.

Madrid:
tuition and fees for one semester (\$4,320) includes round-trip air fare, tuition and examination fees and stipend to sponsor in Madrid.

Sorbonne:
tuition and fees for one semester (\$4,320) includes round-trip air fare, tuition and stipend to sponsor in Paris.

Tübingen:
tuition and fees for one semester (\$4,320) includes round-trip air fare, tuition and stipend to sponsor in Tübingen.

Other Special Fees

Chemistry 490	\$20
Education 470: off-campus student teaching (per semester)	\$4,060
<i>(includes tuition, fees and pre-school week board privileges in the Bethany dining hall)</i>	
English 160	\$15
Physical Education 340	\$30
Physical Education 341	\$30
Each academic hour when less than 13	\$290
Each academic hour in excess of 16	\$250
Auditing a course, per semester hour	\$250
<i>(a student is not charged if paying regular tuition and fees and the total program, including the audit, does not exceed 18 hours)</i>	
Comprehensive Examination	\$25
Graduation Fee	\$35
Matriculation Fee	\$20
Special Advising Fee	\$275
Special examinations in any department	\$15
<i>(there is a \$10 charge for each credit hour awarded by examination)</i>	
Special Room Rates:	
Single	\$585
Double as Single	\$680
Key deposit for dormitories <i>(refunded if key is returned)</i>	\$5

Payment of Student Accounts

At registration, an invoice listing all charges due for the following semester is prepared for each student. Payments are due in accordance with the following schedule:

First Semester:

By August 15 payment due

Second Semester:

By January 15 payment due

Scholarships and loans may be applied as credit against August or January payment requirements.

Students will not be permitted to register if the payment requirements for each semester are not met. These requirements are in addition to the registration deposit. Checks or drafts should be made payable to Bethany College.

Bethany College bills for tuition, fees, room and board – twice yearly; other charges are billed as incurred. Twice yearly billings are payable in advance by August 15 and January 15 for the fall and spring semesters respectively.

Accounts past due – a monthly service charge of 1.5% on the first \$1,500 (18% per year) and 1% on any remaining balance (12% per year) will be charged as of the 25th of each month.



Students may not take final examinations, receive academic credit, obtain transcripts or graduate until satisfactory arrangements are made to cover financial obligations.

Monthly Payment Plans

Bethany has made arrangements with the Insured Tuition Payment Plan and EFI – Fund Management whereby student accounts may be paid on a monthly basis during the year. Arrangements to use this plan should be made prior to the registration period. Information may be obtained by writing to the Bethany College Business Office.

Student Drawing Account

The Business Office provides a limited banking service whereby students may deposit funds and draw on them as required. Students or their parents may make deposits to this recommended student drawing account which avoids the necessity of keeping on hand any substantial amount of money. All checks for this account must be made payable to the Bethany College Student Drawing Account.

Withdrawals and Refunds

After registration, there is no refund of room charges or fees. A student voluntarily withdrawing or withdrawing because of illness during the course of the semester will be charged 10 per cent of tuition charges for each week of attendance or part thereof. There is no refund of tuition after the tenth week of attendance. There is no refund in the event that a student is dismissed or asked to withdraw during the course of the semester. Board refund is prorated, based upon food costs only. Special fees are not refundable.

A student wishing to withdraw from Bethany must file written notice with the Dean of Students to qualify for refund of deposit and adjustment of other charges.



Academic Programs

Based in the liberal arts tradition, Bethany's academic program is designed to meet the educational needs of the individual while insuring breadth, depth and integration of knowledge. Bethany has designed its program of study to help students develop basic intellect, skills of learning, examined values, and good citizenship. Leadership preparation is a central theme of the College.

Through Fields of Concentration (majors) in the traditional academic disciplines and a wide range of pre-professional studies (see listings on Page 5), Bethany prepares students for further study, for employment, and for lives marked by special accomplishments.

A rich variety of learning opportunities is provided both in and out of the classroom and ranges from seminars, lecture courses, independent studies and laboratories to musical and dramatic productions and intercollegiate and intramural sports. Many off-campus programs are offered, including study abroad.

Learning opportunities at Bethany are set within a framework of common educational goals and programs which are organized to provide direction and guidance, as well as independence and choice.

Complementing Bethany's program of liberal education is the Professional Core Program, four distinctive and inter-related curricular options which supplement the student's field of concentration, broaden career opportunities and extend the academic experience.

Professional Core Programs are offered in:

- Management
- Public Affairs (Public Policy/Administration)
- Communication (Marketing or Electronic Media)
- Science and Technology (Computing or Pre-Professional Science)

The Professional Core Program also is viewed as preparation for graduate or professional school in an area outside the student's regular field of concentration. All courses in a Professional Core must be taken for a letter grade.

Details on the Program are available in the Office of Career and Professional Development, as well as from individual faculty members. Students interested in pursuing this option should see their faculty advisor at an early point in their course planning. The four Professional Core Programs, including the courses in each, are outlined on page 43.

Bethany offers pre-professional study programs in:

- Engineering
- Medical and Health Professions
- Law
- Ministry

Students participating in one of the engineering programs spend three years in the liberal arts environment at Bethany and then attend Case-Western Reserve University, Columbia University, Georgia Institute of Technology or Washington University for an additional two years. The program permits the student to earn both a bachelor's degree from Bethany and a B.S. in engineering or applied science from the cooperating engineering school upon successful completion of the five-year sequence.

Students desiring to prepare for the study of medicine, dentistry or any of the health related fields find instruction and facilities at Bethany which satisfy the entrance requirements for the best professional schools.

Medical admission tests must be taken in the junior year and specific course planning is required, beginning with the first semester of the freshman year. Bethany also provides a degree program for certified allied health professionals who have completed accredited technical programs at other institutions.

No single curricular pattern is recommended as preparation for law school, but Bethany provides the key ingredients for entrance, such as breadth of knowledge and high levels of achievement in writing, critical thinking and logical reasoning.

Students planning to enter church vocations complete their preparation in seminaries and graduate schools of religion after undergraduate pre-seminary studies at Bethany.

Bethany provides thorough preparation for professions in the fields of chemistry, business administration, communications media, public administration, teaching of all levels, social work and many more.

Students are encouraged to contact individual academic departments, as well as the College's Office of Career and Professional Development, for academic and career planning.

Requirements for a Bethany Degree

The Bachelor of Arts and Bachelor of Science degrees are conferred by Bethany College.

The Bachelor of Arts degree is conferred upon the student who satisfactorily completes the following requirements:

- 128 semester hours with a minimum cumulative grade point average of 2.0
- a field of concentration
- the Perspectives program
- a senior project
- the senior comprehensive examination in the field of concentration
- demonstrated proficiency in expository writing
- the practicum requirement
- a freshman seminar
- a freshman interdisciplinary lecture course
- Religious Studies 100
- the residence requirement
- attendance at the commencement exercise

The degree of Bachelor of Science may be conferred upon a student who completes the Bachelor of Arts requirements and who chooses a field of concentration in biology, chemistry, computer science, mathematics, physics, psychology (B.S. plan) or science applications.



Field of Concentration

The field of concentration may be either departmental or faculty-student initiated.

A departmental field consists of a minimum of 24 credit hours (excluding the senior project) and a maximum of 48 hours within the department. No more than 24 hours from related disciplines may be required by a department.

The faculty-sponsored or student-initiated field, which may cut across departmental lines, may be developed. This interdisciplinary field of

concentration requires the approval of the Committee on Interdisciplinary Study. Such fields consist of a minimum of 24 hours (excluding the senior project) and a maximum of 72 hours. No more than 48 hours in any one department will be counted toward graduation.

These guidelines exclude any language requirements necessary for professional certification or for admission to a graduate program.

Perspectives Program

The Perspectives Program provides more than breadth to the student's academic experience. In addition to the accumulation of knowledge in a wide variety of disciplines, it is expected that all Bethany graduates will develop eight perspectives on their world, each of which is, in appropriate ways, systematic, ethical and integrative. The eight perspectives are historical, global, religious, aesthetic, scientific, quantitative, social and personal.

All courses within the Program address three overarching concerns of liberal learning: 1) systematic issues of critical thinking about the basic assumptions, methodologies and frames of reference of the subject field, 2) ethical issues within the disciplines studied, and 3) integrative issues designed to assist the student in gaining a personal perspective or point of view about the world as seen through the examined perspective.

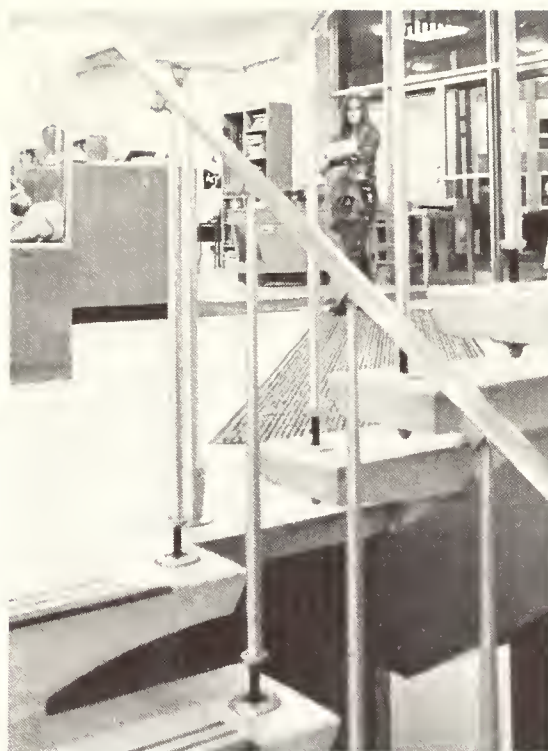
To this end, every student must complete at least four hours chosen among the courses in each of the perspectives categories listed below, plus at least eight additional hours for a total of forty hours in the program. No more than eight hours can count toward fulfillment of the requirement in any one category.

Courses for which students have received credit by examination from a department as a result of high scores on the College Entrance Examination Board Testing Program for Advanced Placement or as a result of special departmental testing procedures may be substituted for the eight additional hours noted above.

The list of approved courses may change from year to year. Only courses taken in the year they appear on the approved list will count toward fulfillment of the requirement.

Historical Foundations: *to achieve a knowledgeable view of basic aspects of the origins and the modern background of Western civilization*

Communications 401; English 370; Fine



and Applied Arts 110, 111; French 313, 351, 352; German 351, 352; History 100, 201, 202, 301, 302; Interdisciplinary Studies 251, 252; Philosophy 323, 324, 325; Physical Education 244; Spanish 351, 352, 353.

Global Awareness: *to gain an appreciation and understanding of the diversity of the world's cultures, not only Western but non-Western*

Communications 403; English 268; French 110, 120, 130, 301; General Sciences 202; German 110, 120, 130; History 426; Interdisciplinary Studies 201, 202, 203, 204, 241; Religious Studies 341, 342, 352; Spanish 110, 120, 130.

Judaeo-Christian Tradition: *to understand the religious tradition of the West, particularly the Judaeo-Christian tradition, including the study of the Bible*

Religious Studies 100, 300, 302, 304.

Aesthetic Judgment: *to develop an ability to discriminate among various aesthetic forms and values and to gain a basic appreciation of the arts*

English 140, 150, 160, 261-262, 263-264, 266, 270, 325, 326, 330, 341, 342, 351; Fine and Applied Arts 101, 102, 120, 200, 201, 270; Philosophy 358.

Experimental Science: *to learn how to explore the natural world through scientific investigation, including both first-hand laboratory (or field) experience and inquiry into the humanistic implications of the sciences*

Biology 100; Chemistry 100, 101, 102; General Sciences 100, 201; Interdisciplinary Studies 210; Physics 201, 202; Psychology 100.

Quantitative Reasoning: *to achieve a knowledgeable view of analytical and quantitative ways of examining the world*

Computer Science 143, 144, 201, 202; Mathematics 103, 201, 202, 250, 281; Philosophy 123; Psychology 103.

Social Institutions: *to grasp the basic organizing principles, structures, policies, and governing ideas of Western social (economic, political, etc.) institutions*

Communications 101, 304, 402; Economics 200, 300; General Science 101; Philosophy 352; Physical Education 243, 280; Politics and Public Policy 225, 231, 300; Religious Studies 322; Social Work 120, 230; Sociology 100, 205, 210, 351, 356.

Human Personality and Behavior: *to establish insight into the ways human beings understand themselves and their behavior and development*

Education 201, 202; Philosophy 100, 124, 252, 355; Physical Education 290; Psychology 186, 324, 325, 326; Social Work 201, 202, 310; Sociology 220.

All courses taken to satisfy perspectives and field of concentration requirements must be taken on a graded basis. All students are required to pass Religious Studies 100. Generally, this course is taken in the freshman or sophomore year, and it may be used to fulfill part of the perspectives program requirements. Students should not enroll in Quantitative Reasoning courses until they have counseled with their advisors regarding the results of the freshman diagnostic test in quantitative skills.

Senior Comprehensive Examination

Capping the Bethany education is the Senior Comprehensive Examination. The examination is scheduled after all requirements for the field of concentration are met and the student has senior standing and at least a 2.0 cumulative average in the field. Comprehensive examinations assure the College of qualitative accomplishment and lead the student to a sense of self-confidence and achievement.

The examination is both written and oral and is offered in January and in May. The oral part of the examination is scheduled by the registrar as soon as practicable after the written, but in no case more than two weeks later. To register for taking the Senior Comprehensive Examination, a student must contact the Office of the Registrar at least two months prior to the first day of the written examination.

Students who have completed all requirements in their field may take the examination in January with the consent of their advisor(s). Students failing the examination in January may take it again in May or at any time it is regularly given within the following 12 months. If the student fails the second time, the student may petition the faculty for a re-examination during the following year. No student may take the examination more than three times.

In some departments, sections of the Graduate Record Examination (GRE) may also be considered part of or prerequisite to the Senior Comprehensive.

Students who do unusually well on the Senior Comprehensive Examination are listed at graduation as having "passed with distinction."



Senior Project

Each student must produce a project which meets the standards of his or her field of concentration.

The project is received and evaluated during the final semester of the senior year. Two to eight hours of credit are given after the final evaluation and approval of the project. Scheduling of the project is at the discretion of the department or the student's advisory committee.

The project is evaluated by at least one person in the field of concentration other than the student's advisor(s). The final evaluation is made in consultation with the student and the project is made available to the College community.

Projects range from extensive research papers to creating graphics on a computer, writing and producing a radio series, designing a brochure, writing and presenting a play.





Writing Proficiency Requirement

All students must achieve and maintain an above-average level of proficiency in expository writing. They may do this by either taking the annual Writing Qualification Test or by satisfactory completion of selected writing courses offered by the English Department. Special arrangements are made for students who transfer from other colleges and transfer students should consult the Department of English immediately upon enrolling at Bethany.

Details on the Writing Qualification Test, including when it is given, as well as information on writing courses from which the student may elect, are included under the Writing Proficiency Program section in the English Department, Page 68.

Practicum Program

Practicums are practical experiences encompassing values Bethany believes to be essential to a complete education. These experiences make a student's academic studies more relevant to the everyday world.

Each student must successfully complete four practicums. They are:

- an example of responsible citizenship
- an awareness and involvement in health, physical education and recreation
- an intercultural living experience
- a vocationally oriented placement.

Students, with the assistance of the advisor and the director of practicums, develop proposals which must have approval of a faculty member and meet the guidelines established for each practicum. Each student completes an evaluation of the experience after each practicum.

Seniors must fulfill all proposals by February 10 and all evaluations by April 15 of the graduation year.

Further information is available from the director of practicums or the registrar.

Residence Requirement

Four years are usually required to satisfy the course and residence requirements for the baccalaureate degree. Students of superior ability may complete the requirements in less time. As a rule, the senior year or the last two semesters are to be spent in residence at the College. However, students who have had one full year of residence previous to their senior year, and who apply for and are approved by the Policy Appeals Board for off-campus study programs during their senior year, may sometimes be permitted to count that work toward graduation requirements.

Freshman Program

Freshman Seminar: All entering freshmen enroll in a freshman seminar during the fall semester of the freshman year. The professor directing the seminar also serves as the student's academic advisor. (Not required for transfer students.)

Freshman Interdisciplinary Course: Freshmen take the freshman interdisciplinary course in the spring semester of the freshman year. (Not required for transfer students with junior standing at entry.)

Descriptions of the courses offered in the freshman program are on Pages 44-45.

Academic Advisor

The student-advisor relationship is the cornerstone of a Bethany education. The student and his or her advisor work together to develop appropriate classroom and experience-based programs. Freshmen see their advisors two times a week during the first semester's freshman seminars and also meet privately with advisors.

Usually during the sophomore year, students elect a major field of concentration, thus transferring to an advisor associated with their major area of interest.

Advisors are designated for freshmen, for specific fields of concentration, for each Professional Core Program, for career interests and for specific services such as campus employment, counseling, graduate programs, testing, scholarships, vocational information and guidance, and others.

A listing of advisors – for freshmen, for fields of concentration, career interests, the Professional Core Program and special interests – is on Page 117.

Career and Professional Development

Bethany's Office of Career and Professional Development assists students and alumni in developing life skills, planning careers and obtaining both temporary and permanent jobs. Personal and career counseling are provided and workshops are presented on such topics as resume writing, interviewing, job hunting, values, skills identification, conflict resolution and time management. The Office coordinates and schedules campus employment and corporate recruiting. It also maintains a Career Resource Center consisting of career planning literature, job announcements, a volunteer contact network of alumni and friends of the College, material on internships and graduate and professional school information. Free credential service is available to all seniors and alumni who register with the Office.

Work Internships

A student may spend a semester combining practical professional experience with formal off-campus study. A student wishing to do this must arrange a full-time job in his or her chosen area and arrange independent study integrating this work experience with formal theoretical study.

A written proposal, signed by the department in which the student intends to earn academic credit, must



be submitted to the Curriculum Review Board of the College. This proposal must be signed by the faculty member charged with supervising and evaluating the project. The proposal must include a description of the student's goals in undertaking the program, a description of the experience that includes a summary of his or her responsibilities and the name of his or her supervisor, a description of the formal independent study course work, an explanation of the way in which the program relates the work experience and the formal independent study course work and a description of the methods to be used in supervising and evaluating the entire project.

Eight credit hours will be awarded for satisfactory completion of the project. No additional academic work may be taken during the semester of the project.

Washington Semester

Arrangements have been made for one or two advanced students in history, politics and public policy, economics or sociology to pursue studies in these fields under the direction of the American University in Washington, D.C. A student participating in this plan takes six to nine hours in regular academic work and six to nine hours in the study of government supervised by Bethany College and American University. Participants in the program must be recommended by the program advisor and have the approval of the Dean of the Faculty.

State Government Study

The Departments of History and Politics and Public Policy administer a program in conjunction with the West Virginia University Foundation in which an outstanding junior or senior is selected each year to spend one week in Charleston, W. Va., studying three branches of state government. Two hours of credit may be granted for this program.

Academic Common Market

Bethany is a member of the Academic Common Market, an interstate agreement among southern states for sharing academic programs. This agreement allows Bethany students, who qualify for admission, to apply for enrollment in 80 graduate degree programs in other common market states on an in-state tuition basis. This program is sponsored by the Southern Regional Education Board. Further information concerning the Academic Common Market may be obtained by contacting Bethany's Office of Career and Professional Development.



Overseas Study Offerings

Under approved supervision and direction, qualified students may secure credit for formal work completed in foreign colleges and universities. To be eligible for study abroad, the student should normally be a junior and must have the approval of the External Programs Committee.

Oxford Semester

Under this program, approximately 20 students spend the fall semester in Oxford, England, studying British literature, history, and culture with a Bethany professor. Participants are matriculated as full-time students at Bethany College, but live and study in Britain.

Paris Sorbonne Program

Under special arrangement with the Sorbonne, qualified Bethany students may enroll for a semester or full year in its Cours de Langue et de Civilisation Française. Bethany's official

representative in Paris serves as counselor to Bethany students during their stay at the Sorbonne.

Madrid Study Program

Under special arrangement with the University of Madrid, qualified Bethany students may enroll for a semester or full year at the university.

Tübingen Study Program

Qualified students are given an opportunity to do intensive study in the German language and to work out an individualized program at the University of Tübingen, Germany. An adjunct member of the Bethany faculty serves as mentor.

Other Overseas Programs

There are additional overseas programs in which Bethany students have participated.

The coordinator of international education programs provides interested students with information concerning programs which have been examined and approved.

External Programs

Bethany College develops special programs for older adults through intensive, short-term residential and off-campus seminars, institutes, courses and workshops. These programs are generally aimed at business, industrial, educational, professional and church organizations. Emphasis is given to the fields of communications, management study, computing, public policy and religion.

These programs are conducted through The Bethany College Leadership Center, Bethany's award-winning conference center which includes the Millsop Conference Center building, Gresham House lodge and Harder Hall educational and dining facility. The Center is another link between the College and the world at large and is used by business corporations, government agencies and non-profit organizations for their professional training and educational needs. The Center also provides opportunities for students, such as internships, practicums and employment.

Each summer, the Bethany campus and facilities are the site for camps for youth. These camps range from computers to a variety of sporting activities and include church groups and bands. Retreats and performing arts workshops are among other well-attended programs planned by or held at the College.



Richardson Hall of Science (1964) provides contemporary facilities for the chemistry, physics and mathematics departments and houses the Academic Computer Center. It is named for Robert Richardson, Bethany's first science professor.

David and Irene Steinman Fine Arts Center (1969) provides excellent facilities for music and theatre. A fully-equipped theatre occupies the central portion of the building. Teaching studios, studio-classrooms, a general rehearsal room for the larger choral and instrument groups, and individual practice rooms support instruction in music.

Cramblet Hall (1905) was constructed through a gift from Andrew Carnegie. Originally the library, it was remodeled in 1961 to house Bethany's administrative offices. It is named in honor of two presidents of the College, Thomas E. Cramblet and his son, Wilbur.

Cochran Hall (1910) was built as a men's residence by Mark M. Cochran of the class of 1875. The interior of the building was completely remodeled during 1974-75 to serve as a faculty office and student conference center. Today it houses several academic departments and administrative offices of the College.

Oglebay Hall (1912) a gift of Earl W. Oglebay of the class of 1869, accommodates the laboratories and classrooms for the biology and psychology departments.

Educational Resources

Substantial resources are invested in the education of Bethany students. The gross assets of the College on June 30, 1985, totaled \$42,510,122. Facilities and equipment at book value were \$24,340,329, with a replacement value of approximately \$37,518,307. The market value of all endowment funds as of December 31, 1985, was \$20,464,432.

More than 30 academic, administrative and residential buildings are located on the 1,600 acre campus.

The principal structures are:

Old Main (1858) is the centerpiece of Bethany's academic buildings. Its tower dominates the campus and is the chief architectural feature noted as one approaches the College. Old Main is listed in the "National Register of Historic Places." The building is one of the earliest examples of collegiate Gothic architecture in the United States. Old Main restoration work has been under way since 1977 with approximately \$2.5 million invested in the project.

Commencement Hall (1872) provides the setting for convocations, concerts, lectures, dramatic presentations and other gatherings. During 1983-1984, the Hall was restored to its original state.

Grace Phillips Johnson Visual Arts Center (1984) offers facilities for computer graphics, television, painting, sculpture and design. The Sandra Weiss Berkman Studio for Ceramic Arts is adjacent to the Center. The building was formerly Irvin Gymnasium (1919). Complete renovation accomplished during 1983-1984 makes this an outstanding facility for instruction in the visual arts.

Pendleton Heights (1841) was built during the College's first year by W. K. Pendleton, a member of the first faculty and second president of the College. Today it serves as home for Bethany's president. Pendleton Heights is listed in the "National Register of Historic Places."

Renner Union-Bethany House (1948) is the student union. Here are found the campus radio station, the College bookstore, a student photographic darkroom, music listening rooms, a spacious lounge, and the Admission Office. The alumni joined in 1969 with the R. R. Renner family of Cleveland, Ohio, to remodel this facility.



Benedum Commons (1969) is the modern, air-conditioned dining facility for all Bethany students. In addition to the main dining room, the building houses a snack bar, lounge facilities and several small dining rooms for special student and faculty events.

John J. Knight Natatorium (1967) contains a six-lane, 25-yard, heated pool which is used in the physical education program and for intercollegiate competition. It is named for John J. Knight, long-time director of athletics. Four tennis courts are located next to the natatorium.

Alumni Field House (1948) provides physical education facilities for men and women. It is also used for concerts. Adjacent to the field house are football, soccer and baseball fields, tennis courts, and a quarter-mile track.

The T. W. Phillips Memorial Library (1959) contains nearly 155,000 volumes of books and bound periodicals with additional collections of microforms, pamphlet files, selected government documents and circulating art prints. Periodicals and newspapers from across the nation and throughout the world arrive daily. The Library has membership in the Pittsburgh Regional Library Center and the OCLC nationwide computerized network. The Library's Campbell Room contains books, periodicals, letters, paintings, photographs and museum pieces related to Bethany's Founder and first President, Alexander Campbell. Also located in the Library is the Media Center which provides instructional media materials, laboratories and production facilities.

The Center for Academic Computing offers a wide variety of services from computer-assisted instruction and word processing to consulting services and classroom computer demonstrations. The Center's PRIME 750 computer is accessible from interactive workstations, including printing terminals and graphics terminal with copier. The facility supports text editing, system software packages, an educational software library and several programming languages. A separate microcomputing facility offers microcomputing training with application to graphics and automated instrumentation data collection.

The Leadership Center

Millsop Building (1972) is the world's first solarized satellite receiving center and houses offices, seminar rooms, exhibition areas, and a 123-seat circular conference room for continuing education activities. The center offers a regular series of conferences, seminars, and workshops for education, business, and professional groups. It is a memorial to Thomas E. Millsop, former president and chairman of the National Steel Corporation.

Gresham House (1972) is a guest facility which provides 40 rooms for overnight accommodations for visitors to the College. It is named for Dr. Perry E. Gresham, Bethany's twelfth president, and his wife, Aleece.

Harder Hall (1981) is an educational laboratory/dining facility. It adjoins Gresham House, the forty room overnight guest facility. It honors Delmar C. Harder, a pioneer in automation in the American auto industry.



College, Student Life

At Bethany, education is a total experience of living and learning. The College community offers a great variety of activities and students are encouraged to participate in those which best compliment their educational experience. Many opportunities for leadership experience are provided.

Bethany encourages the mature and responsible citizenship of its students. The College believes this citizenship is realized through measured personal freedom of each individual, as well as the community building efforts of students, faculty and administrators. College officials intervene when the rights and privileges of some are threatened by the actions of others.

During the 1985-1986 academic year, students, faculty and trustees cooperated in writing a Compact for Bethany College. This Compact is a general statement of philosophy, aspiration, and expectation regarding the way the entire Bethany community is to live together. All members of the College are urged to read and live up to the ideals of this statement. It can be found in the Bethany College Student Handbook.

Student Government

The Student Board of Governors, with representatives from all residence groups, manages a substantial budget and appropriates funds for a wide variety of student activities. Students are appointed to many faculty committees, including those concerned with curricula, athletics, religious life, international education, cultural and speakers' programs and others.

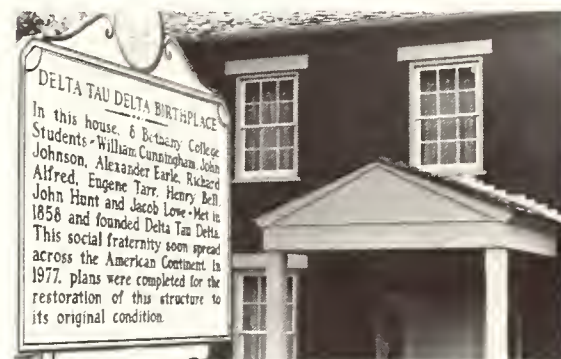
Residence halls help to shape the social life of the campus. Fraternities, sororities and house associations accommodate all upperclassmen in small, self-governed units. Students are responsible for their conduct; for academic, cultural and social programming; and for care of the facilities. Freshmen, soon after their arrival, organize and send representatives to student government.

Residence Life

Most Bethany residences are small living units accommodating 32 or 48 students and containing social and recreational facilities.

Freshmen live in somewhat larger residence halls but are granted many of the same freedoms and responsibilities of the upperclassmen. Head residents and student resident assistants give leadership and counsel to freshmen.

Phillips Hall, one of two freshmen women residences, is the most gracious residence hall on campus. Built in 1890, it was remodeled and restored in the late 1970s. The ground floor now houses a large, multi-purpose recreation room, Renner Too, and Maxwell's Coffee House and kitchen facilities.



Social, Fraternal Life

Fraternities, sororities and independent house associations constitute the primary social groups of upperclass men and women on campus. The six fraternities and four sororities are nationally affiliated and their members constitute approximately 65 percent of the student body. Representatives from each act as the coordinating agencies in fraternal affairs and activities.

Fraternities represented are Alpha Sigma Phi, Beta Theta Pi, Delta Tau Delta, Kappa Alpha, Phi Kappa Tau and Sigma Nu. Sororities are Alpha Xi Delta, Kappa Delta, Phi Mu and Zeta Tau Alpha.

The student-run College Union Program Board is responsible for much programming which includes a wide range of musical groups, from contemporary performers to opera and dance, and other cultural activities ranging from speakers to art and photographic exhibits.

In the past few years, Bethany programs centering on international business, American business and American politics have offered an array of distinguished speakers and visitors to the campus to meet with students as well as faculty. Leading these programs have been a former President of the United States, three United States Senators, two governors, a former Governor, an Ambassador, five corporate chief executive officers and a dozen or more leaders in the fields of public affairs, business and the arts and sciences. Each presentation has included social as well as seminar and workshop contact for students.

Other activities on campus which are well supported by student participation include theatre, various musical groups, intercollegiate and intramural sports and a score or more student-run clubs. The campus media – a weekly newspaper, yearbook, a magazine, a literary magazine, an FM radio station and a cable TV station – command much student interest and participation.



Religious Life

Many religious backgrounds are represented in the student body and faculty. While participation in religious activities is voluntary, there are many opportunities for religious participation on campus.

Many students find in Bethany Memorial Church an opportunity for expression of their religious faith. The minister of this church, who is also the College chaplain, is available to students for counseling and advice on personal and religious matters.

The Bishop of Wheeling-Charleston Diocese of the Roman Catholic Church provides a chaplain and chapel for Catholic students. He is available daily for counseling, in addition to the celebration of Mass each Sunday and on Holy days.

The Jewish fellowship meets for worship and study. Jewish congregations in Steubenville and Wheeling sponsor the fellowship and entertain Jewish students for the high holidays.

Student Regulations

A complete description of the regulations pertaining to housing, telephones, dining rooms, health services, motor vehicles, use of alcoholic beverages and drugs, eligibility requirements, and other areas of student life is contained in the *Student Handbook*. However, applicants for admission should know the following in advance:

- 1) The College expects and enforces lawful behavior in all matters. Particular emphasis is placed upon respect for the rights of others and upon other principles of good citizenship.
- 2) With the exception of commuters (i.e. married students or students living with parents) all students are required to live in College residence halls or fraternity or sorority houses unless excused by the Dean of Students.
- 3) All students, except commuters, are required to board in the College dining hall unless excused by the Dean of Students. No refunds are granted for meals missed.
- 4) Freshmen are not permitted to bring automobiles to Bethany unless the request is approved by the Dean of Students and the vehicle is properly registered.
- 5) Violations of regulations which are not adequately dealt with by the self-governing housing unit are judged or otherwise disposed of by the Dean of Students.



Intercollegiate Athletics, Intramurals, Recreation

Bethany College is a member of Division III of the National Collegiate Athletic Association. Women's and men's teams participate in the Presidents' Athletic Conference. Members of the Conference, in addition to Bethany, are Carnegie-Mellon, Grove City, Thiel, Washington & Jefferson, John Carroll and Hiram. Men's teams compete in baseball, basketball, cross country, football, golf, soccer, swimming, tennis and track. Women's teams compete in basketball, field hockey, softball, tennis, and volleyball, with individual opportunities for varsity participation in cross country, swimming and track.

Club sports teams provide intercollegiate competition opportunities in men's ice hockey, men's and women's lacrosse and women's soccer.

Recreation is provided for the entire student body through an extensive intramural and open recreation program. There is ample opportunity for students wishing to pursue everything from archery to rafting, backpacking to jogging and team sports.

Facilities on campus and nearby offer opportunities for football, racketball, softball, baseball, basketball, volleyball, soccer, tennis, swimming, golf, cross country, track, table tennis, bowling, wrestling, badminton, horseback riding, body mechanics, dancing, gymnastics, aerobics, skiing, jogging, camping, hiking and nature study.

Student Health Services

All students entering Bethany for the first time are required to submit a completed physical examination form before registration. The College health service is maintained by student fees, and all students are entitled to nursing service and specified access to a physician. A minimum charge for prescription medicines, ointments or injections may be added to the student's account under certain conditions.

The Bethany infirmary is on 24-hour call for illnesses and injuries which occur during the academic year. Service is not available at the infirmary during vacations and recess periods. Students who suffer serious illnesses and accidents are usually treated at the Wheeling Hospital, located 15 miles from the town of Bethany. Ambulance service for emergencies is available.

The College physicians have regular office hours during the week for free consultation. In case of an emergency operation, when the parents cannot be reached, the Dean of Students, upon the recommendation of the College physician, assumes the responsibility of giving permission for treatment.

Bethany provides medical, surgical, and hospitalization insurance. All students are automatically included in the coverage from September 1 to August 31 and are charged accordingly unless the appropriate waiver is forwarded to the Business Office. Expenses for outside consultation and treatment are the responsibility of the student in all cases when not covered by insurance.



Scholarships, Recognition Awards

Bethany recognizes promise and intellectual attainment by awarding a large number of scholarships. These awards vary in value and are available to a limited number of entering students. Most scholarships are awarded to freshmen on a four-year basis but are continued from year to year, only if the recipient has met the following conditions:

- A satisfactory scholarship index
- Satisfactory conduct as a student
- Worthwhile contributions to the College program
- Constructive citizenship in the College community
- Payment of student accounts as scheduled

Each fall, Bethany holds the **Competitive Scholarship Opportunity**, a program which offers tuition grants, regardless of financial need, in areas of social sciences, physical and life sciences and the humanities. These scholarships are awarded on the basis of performance on a competitive examination, secondary school record, standardized test scores and personal qualities.

Each spring, Bethany offers its **Kalon Leaders Program** in which participants vie for four-year tuition grants, also regardless of financial need. Selection is based upon past leadership achievements, secondary school record, a required essay and references. Candidates are interviewed by Bethany faculty and the results of these interviews are used in the selection process.

Bethany offers a wide range of scholarships, designated and external trust scholarships as well as sustained awards and loan funds.

These awards, most named for distinguished alumni and faculty members and friends of the College, are awarded to worthy and eligible students. Some are designated for specific fields and interests.

Awards are made by the President and by the Scholarship and Financial Aid Committee in accordance with the requirements of a particular endowed fund.

A complete listing of all scholarships is available from Bethany's Office of Development, the Office of the Dean of the Faculty, and the Office of the Dean of Students.

Achievement Recognition

Bethany encourages achievement in scholarship and leadership in student affairs by public recognition at Commencement, Honors Day and on other suitable occasions.

Graduation Honors

Students who have done academic work of unusual merit are graduated with honors: *Summa Cum Laude* (3.85), *Magna Cum Laude* (3.65), or *Cum Laude* (3.35). The awarding of honors is determined upon the basis of total quality points earned, standing in the Senior Comprehensive Examination, and the recommendation of the student's advisor.

Senior Fellowships

Certain members of the junior class may be designated as senior fellows for the following year. The selection is made from students who have demonstrated unusual excellence in their field of concentration and who, by character and ability, can do special work in a department or area as an assistant in instruction or research.

Usually no more than 12 full-year senior fellowships and one senior fellowship *at-large* (or the equivalents) are awarded in any one year. Usually no more than one full-year appointment (or the equivalent) will be made in any one department or area. Although the title of *senior-fellow-at-large* is provided primarily for capable students involved in interdisciplinary programs, students in other fields of concentration may be nominated for this category.

The selection of senior fellows is made by the Honors Committee from nominations usually presented by department heads.

Dean's List

At the end of each semester, students who have rated high academically (grade point average of 3.65 or better) and have completed at least 12 graded hours during the semester are designated as "Students Distinguished in Scholarship." Often called the Dean's List, this distinction is determined by the Honors Committee.

Honor Societies

A number of honor societies have been established at Bethany through the years to recognize academic achievement and campus leadership.

Gamma Sigma Kappa is a scholastic society founded at Bethany in 1932. Students who have achieved a cumulative scholarship index of at least 3.70 (over at least four consecutive semesters and provided that in no semester their scholastic index falls below a 3.00 and provided the student has completed at least 12 graded hours in each of the semesters) may, upon recommendation of the Honors Committee, be considered for membership. Usually, however, not more than 10 percent of any class will be recommended.

Bethany Kalon is a junior and senior society established in 1948 to give recognition to students of high character who have demonstrated competent and unselfish leadership in student activities and have been constructive citizens of the College community. Selection is made by the members of the society with the advice and approval of the Honors Committee.

Alpha Phi Chapter of Beta Beta Beta is for students of the biological sciences. Its purpose is to stimulate sound scholarship, to promote the dissemination of scientific truth, and to encourage investigation into the life sciences.

Alpha Beta Gamma is an honorary organization in education dedicated to recognizing and fostering professional concern, involvement, and experience in education.



Gamma Upsilon Chapter of Lambda Iota Tau. Lambda Iota Tau is an international honor society for the encouragement and reward of scholastic excellence in the study of literature. Membership is limited to juniors and seniors who have a cumulative scholarship index of 3.0, who have completed a minimum of 12 semester hours of literature courses with at least a 3.0 grade-point average in them and in all prerequisite courses, and who have presented a scholarly, critical, or creative paper which has been accepted by the chapter. The chapter presents an annual award for the best senior project in literature. Lambda Iota Tau is a member of the Association of College Honor Societies.

Alpha Chapter of Omicron Delta Epsilon, an international honor society in economics, was established in 1960 to recognize excellence in the study of economics. Membership is limited to students who have completed a minimum of 16 semester hours of economics, including either Economics 301 or 302, and who have achieved both a departmental and overall grade-point average of 3.25 or better.

Beta Gamma Chapter of Alpha Psi Omega. Alpha Psi Omega is a national recognition society in dramatics. Students qualify by faithful work in playing major and minor roles or working with technical or business aspects of theatre.

Mu Epsilon Chapter of Phi Alpha Theta was established at Bethany in 1967 to recognize excellence in the study of history. Its membership is limited to those students who have completed at least 12 hours of history with a grade-point average of 3.1 or better and with at least a 3.0 grade-point average in two-thirds of all other studies. Members must also rank in the upper 35 per cent of their class.

Bethany Chapter of the Society for Collegiate Journalists, a national recognition society in journalism, is designed to stimulate interest in journalism, foster the mutual welfare of student publications, and reward journalists for their efforts, service, and accomplishments.

Kappa Xi Chapter of Sigma Delta Pi is an honor society for those who attain excellence in the study of the Spanish language and the literature and culture of the Spanish peoples. Students who are at least second semester sophomores and have a high scholastic index and who have completed at least one advanced course in Spanish literature are eligible for membership.

Epsilon Chi Chapter of Kappa Pi is for students of graphic arts. Its purpose is to uphold the highest ideals of a liberal education, to provide a means whereby students with artistic commitment meet for the purpose of informal study and

entertainment, to raise the standards of productive artistic work, and to furnish the highest reward for conscientious effort in furthering the best interest in art in the broadest sense of the term.

Alpha Chapter of Kappa Mu Epsilon, a national honor society in mathematics, was established in 1975 to recognize outstanding achievement in mathematics. Its membership is limited to those students who have completed at least three semesters at Bethany, rank in the upper 35 per cent of their class, have completed at least three mathematics courses, including one semester of calculus, and have a grade-point average of 3.0 or better in all mathematics courses.

Kappa Tau Lambda music honorary promotes greater participation and appreciation of music by encouraging attendance at recitals, sponsoring field trips to concerts and providing an opportunity for students of music to meet and exchange ideas. The honorary also encourages greater participation in College musical groups and solo recitals while upholding high standards of musical performance. Qualifications for membership include at least a 3.0 average in eight or more hours of music.

Phi Delta Psi is a physical education honorary for both men and women which encourages scholarship, leadership, fellowship, high educational standards and participation in departmental activities. To be eligible, students must be at the second semester level of the sophomore year and achieve a grade point average of at least 3.0.

Pi Gamma Mu is a social science honorary for men and women who have achieved high academic standing in the study of history, economics, political science, sociology and geography. A 3.0 average in at least 20 hours of study in these fields and standing in the top 35 percent of their class are required for membership.

Awards

Oreon E. Scott Award is presented to the graduating senior who has achieved the highest academic record over a four-year period of study. The donor of this award was a long-time Bethany trustee and a graduate of the class of 1892.

Anna Ruth Bourne Award stimulates scholarship among the women's social groups. A silver cup, provided by an anonymous donor in honor of the former distinguished head of the English department, is awarded to the recognized women's group whose active membership earns the highest scholarship standing each semester. The group winning the cup for four semesters is presented with a smaller replica as a permanent trophy.

W. Kirk Woolery Award encourages scholarship among the men's social groups. A silver cup, donated by friends of the late Dr. Woolery, a former Dean and Provost of the College, is held by the recognized men's social group or housing organization whose membership (active membership only in the case of fraternities) earns the highest scholarship standing each semester. Any group winning the cup for four semesters is presented with a smaller replica as a permanent trophy.

The Beta Beta Beta — B. R. Weimer Award, established in honor of the late Bernal R. Weimer, Professor of Biology and Dean of the Faculty, is given each year to the senior in biology who has attained the highest academic rank in this field of concentration.

The Beta Beta Beta Prize is awarded the student who has received the highest grades in the initial courses in biology.

Florence Hoagland Memorial Award, given by a graduate of the class of 1944, is presented to the outstanding senior English major. The award honors the memory of the late Miss Hoagland who was for many years Professor of English at Bethany.

Christine Burleson Memorial Award, given by a graduate of the class of 1936, is presented to a senior English major who has attained excellence in this field of concentration. The award honors the memory of the late Miss Burleson who was Professor of English and Dean of Women from 1932 to 1936.

Cammie Pendleton Awards, named in honor of Miss A. Campbellina Pendleton, Professor of Language and Literature at Bethany from 1884 to 1909, are presented to the outstanding junior and sophomore concentrating in English. The awards are given by Dwight B. MacCormack, Jr., of the class of 1956, in memory of his grandmother, Dr. T. Marion MacCormack.

E. E. Roberts Distinguished Prize in Campus Journalism is awarded to an outstanding student who excels in work with one of the student media, in academic work in the Department of Communications, or both.

Winfred E. Garrison Prize is presented in recognition of outstanding achievement in one or more areas of philosophy. The award honors the memory of the late Dr. Winfred E. Garrison, a member of the class of 1892, whose humane concerns and scholarly achievements contributed significantly to the area of higher education, history, and philosophy.

Outstanding Junior Woman Award is provided by the Pittsburgh Bethany College Club, comprising the Bethany alumnae of Pittsburgh. This award is based on qualities of leadership, character, conduct, and scholarship. The club has placed a suitable plaque in Phillips Hall on which names of the winners are engraved. In addition, an individual gift is made to the recipient.

Vira I. Heinz Award is granted to the junior woman who has distinguished herself by leadership, character, conduct, and scholarship and whose proposal for foreign travel most significantly supplements her educational objectives. This award for summer travel is provided by the fund of the late Vira I. Heinz, recipient of the honorary Doctor of Religious Education degree from Bethany in 1969.

Benjamin Chandler Shaw Travel Award is granted to the junior man who has distinguished himself by leadership, character, conduct and scholarship and whose proposal for foreign travel most significantly supplements his educational objectives. This award is funded by an anonymous friend of the College in recognition of the late Dr. Shaw, Bethany's George T. Oliver Distinguished Professor of History and Political Science Emeritus. Dr. Shaw joined the Bethany faculty in 1935, served from 1945 to 1966 as head of the Department of History and Political Science and continued part-time until 1975.

Bettie Blanck Travel Award is made to the student whose proposal for foreign travel best promises to augment study in English literature. The award was established by Thomas A. Hopper, class of 1967, in honor of his mother, a member of the Class of 1944.

W. F. Kennedy Prize is given to the outstanding young man in the junior class. This award, established by W. F. Kennedy of Wheeling, West Virginia, is awarded on the basis of the student's contribution to the College community life through leadership in activities, in personal character, and scholarship.

Pearl Mahaffey Prize is awarded to the outstanding senior major in Languages. The award was established by Mrs. Walter M. Haushalter and other former students of Bethany's emeritus professor of foreign languages. The prize honors Miss Mahaffey, a faculty member from 1908-1949 and a trustee of the College at the time of her death in 1971.

Shirley Morris Memorial Award was established by Theta Chapter of Zeta Tau Alpha in memory of Shirley Morris, a loyal member and past president of the chapter. It is given to an outstanding student in the field of modern languages. Selection is made by the Department of Foreign Languages.

Margaret R. Woods Prize, sponsored by the Kappa Xi Chapter of Sigma Delta Pi, is awarded to the outstanding Spanish major. The prize honors Miss Woods who was a faculty member from 1943 until her retirement in 1965. Selection is made by the Department of Foreign Languages.

Auguste Comte Award is presented to the senior of the Sociology Department for outstanding scholarship and keen interest in the field. The award is named after the founding father of the discipline.

Charles H. Manion Award is made to the outstanding senior in Fine and Applied Arts with an emphasis in one of the Art areas. The award memorializes Charles H. Manion, long-time trustee of

Bethany College who was associated with the steel industry in the Ohio Valley and who enjoyed painting. The prize is provided by his daughter, Mrs. Leonard Yurko, Weirton, West Virginia.

Theodore R. Kimpton Prize is awarded to the outstanding French student. This prize, which is restricted to those students whose native language is other than French, was established by Theodore R. Kimpton, assistant professor of foreign languages at Bethany prior to his retirement from full-time teaching in 1975.

George K. Hauptfuehrer Award in Music is co-sponsored by the Music Society and Kappa Tau Lambda in honor of George K. Hauptfuehrer, Professor of Music and Head of the Department of Music Emeritus. The award is presented to the Bethany student who has demonstrated musical excellence and has participated actively in campus musical organizations. The award is open to both majors and non-majors, with preference given to upperclassmen.

J. S. V. Allen Memorial is a fund established by the family and friends of Professor Allen to provide for an annual award to the outstanding physics student.

Frank Alfred Chapman Memorial is a fund established by Dr. Stanton Crawford to provide for an annual award to the outstanding history student. Preference is given to students of American history and the Ohio Valley.

Osborne Booth Prize is given to the student who excels in the field of religious studies and in the overall academic program. The late Osborne Booth was T. W. Phillips Professor of Old Testament when he retired in 1964 after 35 years of teaching at Bethany.

Francis O. Carfer Prize is given to the senior who, in the judgment of the Honors Committee, has made the most outstanding contribution to the College. Mr. Carfer, a trustee of Bethany College for 29 years, was a graduate of the class of 1909. Recipients of the award must display sound academic accomplishments and characteristics of loyalty, service, and devotion to Bethany.

W. H. Cramblet Prize recognizes outstanding achievement in mathematics. It is named in honor of Wilbur H. Cramblet, the eleventh president of Bethany College.

John J. Knight Award is presented to the senior male Physical Education major displaying outstanding scholarship and athletic participation during his four years at Bethany.

S. Elizabeth Reed Award is presented to the senior woman showing outstanding scholarship and athletic participation during her four years at Bethany.

Frank Roy Gay Award, established in 1982, is given to the senior interdisciplinary major who maintains a grade point average of 3.5 or above and displays outstanding leadership qualities in the Bethany community. The award is named for the former Professor of Classics at Bethany who taught English literature, religion and philosophy.

A. Kenneth Stevenson Theatre Award is presented each year to the outstanding Bethany junior or senior of any discipline with a grade point average above 3.2 who has contributed

the most significantly to Bethany College Theatre activity. The award also provides for guest artists to enhance the program in Theatre. A. Kenneth Stevenson of Washington, Pa., was a long-time supporter of the Bethany College Theatre program until his death in 1979. Mrs. A. Kenneth Stevenson, her sons, Drew and Mark, both graduates of Bethany, and members of the Department of Fine and Applied Arts make the yearly selections.

Forrest H. Kirkpatrick Award is presented annually to the outstanding senior concentrating in economics and business. The award is named in honor of Dr. Kirkpatrick, long-time dean of the College who is currently serving as adjunct professor of economics.

The Rush Carter Prize in music is presented to a member of the senior class in recognition of outstanding achievement in music. The prize honors the memory of the late Professor Carter who was a member of the Bethany faculty from 1934 to 1945.

The Edna W. Woolery Bibliography Prize is awarded to a senior student and to a freshman student who have individually compiled a bibliography and who request that it be considered for receiving the award. Edna W. Woolery was a Librarian at Bethany during the 1950s. In the event that the Award, established in 1981, is not granted in any year, the funds are used to purchase Library books. Additional information is available from the Librarian.

Wall Street Journal Award is given to the student majoring in Economics who has the highest average in select department courses and has shown strong participation in departmental activities.

Senior Chemistry Award is granted to the senior concentrating in chemistry who has achieved the highest cumulative average in the Department, including the record made on the Senior Comprehensive Examination.

The Thomas R. Briggs Award is presented annually to the senior in psychology who has maintained the highest academic average in the department. The award is a memorial to the late Thomas R. Briggs, Class of 1978, recipient of the Psychology Society Award in 1978.

Society for Collegiate Journalists Award of Merit is presented to an upperclass writer or editor for significant contributions to campus student publications.

WVBC-FM Senior Award is given to the senior who for four years has lent qualities of dedication, loyalty, leadership, talent, and creativity to WVBC's operations.

WVBC-FM Talent Award is presented to the member of the WVBC staff who has offered the most outstanding continuous radio programming during the year.

Freshman Writing Prizes, provided by alumni and awarded by the Department of English, are given annually to authors of the best essays written in Freshman Seminars. Each seminar leader submits the two best essays from the group and the winning essays are determined by a panel of judges.

Research Awards

The Gans Fund Awards are presented to juniors, seniors and graduates of the College who are engaged in approved study and research in some specific field of the sciences at Bethany College or elsewhere. The direct charge is "for the encouragement of research and discovery in the various fields of science." The awards were established by Wickliffe Campbell Gans of the Class of 1870 and Emmet W. Gans in memory of their father and mother, Daniel L. and Margaret Gordon Gans.



Academic Procedures

Course Load

A normal semester load is 16 hours. A student may elect activities courses such as music, chorus, band, physical education, up to two hours with no additional fee charge, making the maximum academic course load 16 hours plus two hours of activities courses. Permission to take additional courses must be obtained from the Dean of the Faculty. Fees will be charged for any such approved courses. Applications for excess hours are available in the Registrar's Office.

A full-time student is defined as any student carrying at least 12 hours per semester.

Independent Study

Each department offers independent study for those students who have demonstrated the ability to work individually in some area of special interest. The student selects an area of study, subject to the approval of the head of the department, after which he or she completes an Application for Independent Study in the Registrar's Office before the start of the semester.

Cross-Listed Courses

When a course which is part of a department's *requirements* for its field of concentration is cross-listed, a student concentrating in that field may register for the course in any department in which it is cross-listed, but the course will count as part of the maximum credit which may be earned by the student within the department of his or her field of concentration.

Course Offerings

Most courses listed in departments are offered annually. Many, however, are offered every other year and a few are offered in three-year cycles. Students should see respective department heads for long-range course planning.

Grading System

Letter grades given and their equivalents in quality points are:

A	4.00
A -	3.75
B +	3.25
B	3.00
B -	2.75
C +	2.25
C	2.00
C -	1.75
D +	1.25
D	1.00
D -	.75
F	.00

Students are required to take at least 100 hours of letter-graded work.

Grades mean: A, *Superior*; B, *Excellent*; C, *Average*; D, *Below Average*; F, *Failure*.

Other report abbreviations and their meanings are:

Cr. *Credit*. No quality points.

NCr. *No-Credit*. No quality points or academic penalty.

F. *Failure*. No quality points; denotes work that is unsatisfactory.

Inc. *Incomplete*. Incomplete work is a result of sickness or some other justifiable reason. An incomplete must be removed by the end of the fourth week of the following semester, unless an extension of time is granted by the Dean of the Faculty. It is not possible for a student to remove an incomplete after 12 months.

W. *Withdrawn*. Indicates withdrawal from a full-semester course before the end of the ninth week of the semester, or withdrawal from a half-semester course before the end of the fifth week of the course. Carries no quality points or credit hours.

Any student who carries 12 hours of letter-graded academic work may elect to take additional work on a Credit-No Credit basis in courses which are not used for the field of concentration or the Perspectives Program or a Professional Core.

A report of the scholastic standing of students is received at the Registrar's Office at mid-semester in addition to the final semester reports. These reports are sent to the faculty advisor and the parents or guardians of each student.



Classification of Students

For sophomore rank a student must have at least 25 hours of academic credit. Admission to full junior standing is conditioned upon the student having at least 60 hours of academic credit. For senior class rank the student must have at least 94 hours of academic credit.

Students are not considered candidates for the baccalaureate degree until they have been granted senior classification, have filed an application to take the Senior Comprehensive Examination in their field of concentration, and have filed an application for a degree.

Change of Schedule

During the first five class days of each semester, a student, with the approval of the advisor, may drop or add any course. No classes may be added after this time. With proper approval, a student may drop a course any time before the final.

Class Attendance Policy

Students are expected to attend all classes and appropriate laboratory meetings of a course and to participate in all outside activities that are a part of the course.

It is the responsibility of individual instructors to evaluate the importance of participation in determination of course grades. Students and faculty should demonstrate concern for each other in attendance matters. The Dean of Students grants excused absences in the event of serious, personal or family emergencies or authorized college events.

Special Examinations

A student justifiably absent from a final examination or a test given in connection with regular class work is permitted to take a special test without payment of fees with the consent of the instructor and approval of the Dean of the Faculty. For any other examination a fee must be paid at the Business Office before the examination is taken, and the proper receipt must be presented to the instructor at the time of the examination.

Probation

The term "on probation" is applied to students who are allowed to continue at Bethany after having failed to meet the standards expected by the faculty and administration. Students may be placed on probation for any of the following causes:

- 1) Unsatisfactory scholastic record. The following academic basis will be used to determine probation each semester: Freshmen must achieve at least 1.7, Sophomores 1.8, and Juniors and Seniors 2.0.
- 2) Unsatisfactory class attendance during the semester or preceding semester.
- 3) Unsatisfactory conduct at any time.

Probation is intended to be a warning to students (and to their parents or guardians) that their record is unsatisfactory and that unless significant improvement is made they will be asked to withdraw from the College. At the end of a semester on probation the student's total record is reviewed. Continued enrollment depends upon the trend of academic performance. The Policy Appeals Board may dismiss any student if the student is not likely to meet the requirements for graduation in the usual period of four years. An extension of the four-year period is granted only when there are extenuating circumstances.

Withdrawal

An honorable dismissal is granted to students in good standing who may desire to withdraw from the College if they have satisfied their advisor and a responsible officer of the College that there is a good reason to justify such action. Students asking to withdraw should present a written request to the Dean of Students along with a statement of approval from parent or guardian. The recommendation of the Dean of Students is next presented to the Business Manager and then to the Registrar for final record. No withdrawal is considered complete until this procedure has been carried out.

Transcript of Records

Students wishing transcripts of records in order to transfer to other schools or for other purposes should make application to the Registrar's Office at least one week before the transcript is needed. Transcripts are issued only at the request of the student, and official transcripts are sent directly to the college or university specified by the student. One transcript is furnished to each student without charge; for each additional transcript a fee of \$1.00 is charged. When three or more transcripts are ordered at the same time, the first transcript is \$1.00, whereas the others cost \$.50 each. Fees must accompany the request. All financial obligations to the College must be paid before a transcript is issued.



Invalidation of Credits

Courses completed at Bethany or elsewhere, more than 10 calendar years before the date of proposed graduation, are not accepted for credit toward graduation. All candidates are expected to comply with degree requirements in effect at the time of acceptance of the degree application. With the approval of the Policy Appeals Board and the payment of the required fee, the candidate may take examinations, as administered by the various departments, for courses included in the current curriculum, to reinstate academic credit that may have been declared invalid because of date.

Policy Appeals Board

The faculty members who sit on the Policy Appeals Board evaluate student requests for exceptions to regular academic policies and regulations. Student requests are submitted in writing and should include the advisor's recommendation.

Changes in Regulations

Bethany reserves the right to amend the regulations covering the granting of degrees, the courses of study, and the conduct of students. Membership in Bethany College and the receiving of its degrees are privileges, not rights. The College reserves the right (and the student concedes to the College the right) to require the withdrawal of any student at any time.

Curriculum Index

Professional Core Programs	43
Freshman Studies	44
Accounting	45
Astronomy	46
Biology	47
Chemistry	49
Communications	51
Communications Design	53
Computer Science	54
Economics and Business	56
Education	59
English	67
Fine and Applied Arts	72
Foreign Languages	75
General Sciences	79
Geography	79
Graphics	79
Health Science	80
Heuristics	80
History	81
Interdisciplinary Studies	84
Library	85
Mathematics	86
Philosophy	88
Physical Education	90
Physics	95
Politics and Public Policy	98
Psychology	100
Religious Studies	103
Science Applications (Honors)	106
Social Sciences	106
Sociology and Social Work	107



Professional Core Program

The Professional Core Program is an option for every Bethany student. In electing a field of concentration, as well as a Professional Core, students broaden their possibilities for employment and their options for graduate or professional study.

Professional Core programs are available in:

- **Management**
- **Public Affairs (Public Policy/Administration)**
- **Communication (Marketing or Electronic Media)**
- **Science and Technology (Computing or Pre-Professional Science)**

Management: to assist students in describing and determining the roles, reactions and relationships of individuals and groups within a management structure. Students completing this Core should have the capacity to enter a management position in business, public agencies, schools and other organizations with a higher level of understanding and skill in dealing with management issues. Required are 18 hours: Accounting 211, Economics 200 and 280, Psychology 287, Computer Science 100. Six hours are to be taken from Economics 111, 286; Communications 302; Computer Science 140, 144; Politics and Public Policy 227, 300; or Sociology 309.

Public Affairs: to become knowledgeable about the nature of problems in the broad area of public affairs and to be able to deal with issues of public policy and public administration. Completion should enable the student to have a basic capacity to analyze and assess public policy issues and needs, to implement and administer public policy programs, to develop public policy plans and to evaluate public programs. Required are 18 hours: Politics and Public Policy 231, 232, 300; Economics 200, and Computer Science 100. An additional four hours are to be taken from Politics and Public Policy 331, 332; Economics 280, 302; Sociology 205, 309; Psychology 287; Mathematics 281; Communications 402; or Computer Science 140, 144.

Communication: to develop the student's facility to understand and to use techniques of effective communication to wide audiences. Within this core, two options are available, one in Marketing and the other in Electronic Media. Marketing focuses on a variety of communication needs within the world of business and industry. Electronic Media focuses on radio and television as media for mass communication. For Marketing, required are 24 hours from Communications 101, 301, 302; Economics 111 and 290; English 205; Psychology 287. For Electronic Media, required are 22 hours from Communications 101, 201, 261, 271, 304, 310, 311 and Fine and Applied Arts 404.

Science and Technology: to provide a basic knowledge in one of two areas, Computing and Pre-professional Health Science. The Computing option aims at providing a working knowledge of computers, especially as related to the student's regular field of concentration, thus providing job-entry skills not typically available to those studying in traditional liberal arts fields. The Pre-professional Health Science option provides a basic science education for those interested in pursuing health-related professions, including those seeking entrance to schools of medicine,



veterinary medicine professional schools. This curriculum provides the basic elements of what is usually expected of applicants to such schools.

In Computing, 14 hours are required from Computer Science 100, 201, 202, 450; plus any one of the following: Computer Science 140, 142 or 144. In Pre-professional Health Science, 40 hours of course work grouped from Animal Biology, General Chemistry, Organic Chemistry, Physics, Calculus, English. Specific courses should be carefully selected in consultation with the student's advisor and the Health Science Committee and students selecting Pre-professional Health Science must submit a separate list of courses included in their program as worked out with advisors.

Course Descriptions

Freshman Studies and Freshman Seminar

Freshman Studies

Interdisciplinary Lecture 100 The Origins of Western Thought III: The Modern World 4 hours

This course centers on the modern world and its origins and stresses the basic ideas, historical events, aesthetic styles and primary writings which have shaped the modern world. *Must be taken in the first year by all new freshmen and by all transfer students who matriculate as freshmen or sophomores.*

Freshman Seminar 4 hours

Sec. A Hatfields and McCoys: Appalachian Myths, Legend, and Reality

This seminar represents a humanistic and social scientific venture in a regional community study. It takes advantage of West Virginia's unique position as a laboratory for such inquiry. It explores such factors as ethnic patterns and diversities, struggles for modernization, demographic trends, and socio-cultural attitudes. Students will explore the myths, legends and realities of Appalachia through selected Appalachian literature, films, field trips and craft activities. *(Lynn Adkins, Professor of Sociology and Social Work)*

Sec. B Ethical and Religious Issues in the News

This course will involve acquiring an extensive knowledge of current events and issues, studying these in their cultural and historical contexts, and analyzing them with particular emphasis on theological and ethical dimensions. *(William B. Allen, College Chaplain)*

Sec. C The Human Struggle Through Sport
This seminar explores through the medium of sport literature the impact of sport on society and self. In it, students will examine the social and psychological effects on participants and consumers of sport through study of fiction, essays and poetry having a sport motif. Topics include racism, sexism, love, death, age and winning. *(James Allison, Associate Professor of Mathematics)*

Sec. E Sensitivity to the Natural World

This seminar is an introduction to the natural world based upon the observations of plants and animals in the natural settings. Most sessions will be held outdoors at Bethany and at several nearby, important natural sites. *(Albert R. Buckelew, Jr., Professor of Biology)*

Sec. F "Main Street, U.S.A."

A study of the American small town as it has been treated in literature and as it exists today. Students will study the historical role the small town has played and examine the problems facing the small town in the present and the future. Students will use Bethany as a laboratory, investigating the social and civic organizations, the government, and the people. *(Robyn R. Cole, Assistant Professor of English)*

Sec. G Crime and Its Detection

A study of crime fiction and film from Conan Doyle to the present. Emphasis on crime fiction as intellectual puzzle, social commentary, and metaphor for the age. Students will examine works by Doyle, Kafka, Chandler, John D. MacDonald and others. They will also engage in simulation games and a mock trial. *(Larry E. Grimes, Professor of English)*

Sec. H Adapting Fiction for Stage and TV Production

Students will read short American Southern fiction for the purpose of adapting the works to serve as play or TV scripts to be performed in live or taped productions. The course emphasizes sound reading, effective script writing, and inventive production responsibilities, i.e., direction, and/or performing, designing or producing. *(David J. Judy, Professor of English and Theatre)*

Sec. I This Old House

This seminar will study old mansions and other historic houses in the local region as an introduction to American architectural history and as a means of discerning the cultural, social and economic forces which shape a region. Students will tour restored houses, analyze the architecture of a neighborhood, visit restoration architects working in the field, survey the history of American residential styles and learn how to discover the story of a house. At least one trip to a historic village is planned. Each student will prepare a photographic and written analytic report of an important historic structure or site. *(Hiram J. Lester, Professor of Religious Studies)*

Sec. J Crime and Punishment

A study of the nature and causes of criminals and crime followed by an examination of systems of punishment and rehabilitation will constitute the major activity of this course. Students will also tour prisons and briefly intern in a prison if arrangements can be made (this is a big if). *(John W. Lozier, Associate Professor of History)*

Sec. K Searching for Treasure and Truth

Treasure hunters, detectives, investigative reporters, and scholars all engage in the enterprise of discovery. The seminar will consider the quests of these searchers and the strategies they share in common. By examining real life and fictional accounts, we become more effective learners and researchers. *(Marc Olshan, Associate Professor of Sociology)*

Sec. L The Computer: Fact and Fiction

This seminar seeks to introduce students to computers and computing and to examine some of the implications of computers for human culture and thought. In pursuit of these goals, seminar members will learn elementary programming, will learn to use computerized text editing, and will publish a weekly, computerized newspaper for freshmen, *Fresh News*—while readings will range from technical articles to science fiction. (*J. Trevor Peirce, Professor of Psychology*)

Sec. M Bethany College: Fact and Fiction

This seminar will investigate the various folk lore concerning Bethany College. The investigation will track down the "College" myths such as ghosts, the "Cow in the Tower" tale and many others that have become a rich part of the history of Bethany. (*Howard Seiler, Assistant Professor of Education*)

Sec. N The Entrepreneurial Spirit: Do You Have It?

This seminar will study the entrepreneurial spirit in America. The dimensions of the entrepreneurial spirit will be explored through various readings. There will be visits and interviews with local entrepreneurs. Self-administered tests will be used to determine the degree to which individual students subscribe to the entrepreneurial spirit. The major focus of the course will be a situation in which teams of students start their own business. Finally, students will explore opportunities for enterprise while at college. (*James R. Speegle, Professor of Management and Executive Fellow of The Leadership Center*)

Sec. O Education of the Self

Exploration of three areas considered crucial to personal adjustment and growth: the self-concept, relationships and communication, and a meaningful philosophy of life. Through readings and group discussions it is hoped that students will leave the seminar with a greater understanding and acceptance of self and others. (*T. Gale Thompson, Professor of Psychology*)

**Sec. Q Landmark Experiments in Science**

The basis for our present understanding in physics, chemistry, biology and the other sciences is modern atomic and molecular theory. This theory has evolved since ca: 1800 due mainly to fewer than twenty ingenious experiments. Students in this seminar will have the opportunity to perform several of these classical experiments and at the same time explore the historical, philosophical and scientific implications of each. (*C. Kent Clinger, Associate Professor of Chemistry*)

Accounting

Aims

The accounting program develops an understanding of the functions of accounting, the principles that constitute accounting theory, and the applications of these principles in processing financial information necessary to all economic organizations. The field of concentration in accounting prepares individuals to enter a wide variety of accounting specialties and management positions and to sit for the Certified Public Accountants Examination with an especially strong preparation for its "practices" and "theory" parts. The program also serves as sound preparation for work in government, law, policy planning, and graduate study.

Requirements for Field of Concentration

Required courses are Accounting 211, 212, 312, 313, 314, 330, 352, 415, 425, 441, 461, 477, plus a Senior Project. Related requirements are Economics and Business 200, 301, and 302, Mathematics 201 and 281, and Computer Science 144. Students concentrating in Accounting are limited to a maximum of 12 hours in Economics and Business beyond the required courses (Econ. 200, 301, and 302). Students concentrating in Accounting are expected to attain a minimum grade of "C" in all courses in the program. If a student receives a grade lower than a "C," the student must arrange an interview with the Head of the Economics and Business Department prior to taking additional upper-level courses.

Acct. 211 Principles of Accounting I 4 hours

Introduces principles and procedures accounting uses to process financial information of various business organizations and to present their Income Statement and Statement of Financial Position to external users of the organizations' financial information. Studies the accounting system's methods of collecting financial information, analyzing it, measuring it, recording it, processing it, and finally presenting it.

Acct. 212 Principles of Accounting II 4 hours

Continues introduction of accounting principles and procedures begun in Accounting 211. *Prerequisite: Acct. 211.*

Acct. 312 Managerial Finance 4 hours
(See Economics and Business 312.)
Prerequisites: Acct. 211 and 212.

Acct. 313 Intermediate Accounting I 4 hours

Begins a three-course sequence of accounting. This sequence of courses, together with Acct. 425, constitutes the "bedrock" for a solid foundation in accounting. Mastering these courses is essential for success in accounting. The intermediate accounting sequence provides an intensive and extensive study of accounting principles and procedures as they are applied to various situations and events. Acct. 313 provides a review of Acct. 211 and 212, studies the time value of money, accounting for liquid assets, and accounting for inventories. *Prerequisite Acct. 212.*

Acct. 314 Intermediate Accounting II 4 hours

Continuation of the intermediate accounting sequence. Studies accounting for liabilities and income taxes, operational assets, intangible assets, and corporation capital and earnings. *Prerequisite: Acct. 313.*

Acct. 330 Business Law 4 hours
(See Economics and Business 330.)

Acct. 352 Accounting for Not-for-Profit Organizations 4 hours

Study of accounting systems used to process the financial information of economic organizations not having profit as their primary goal. Studies budget preparation and uses and the integration of budgets into the accounting model of assets equalling equities and debits equalling credits. *Prerequisite: Acct. 212.*

Acct. 415 Intermediate Accounting III 4 hours

Conclusion of the intermediate accounting sequence. Studies accounting for long-term investments, bonds, pensions, leases, changes in principles, in estimates, and for errors, presentation of earnings per share, and preparation of the Statement of Changes in Financial Position. *Prerequisite: Acct. 314.*

Acct. 425 Cost Accumulation and Control 4 hours

Together with the intermediate accounting sequence, this course provides the "bedrock" for a solid foundation in accounting. Studies cost accumulation systems: job order and process, absorption and direct; cost controls: flexible budgets and standard costs; and cost, volume, profit relationships. *Prerequisites: Acct. 212 and either Acct. 314 or permission of the instructor.*

Acct. 441 Federal Income Taxation of Individuals 4 hours

Study of federal income tax law and implementing Treasury Department regulations and procedures governing federal taxation of individuals. Provides a general knowledge of federal individual income taxation rather than specific instructions in completing individual federal tax returns. *Prerequisite: Acct. 212 or permission of the instructor.*

Acct. 461 Financial Auditing 4 hours

Integrates several accounting courses. Introduces auditing principles and procedures as they are used to determine the fairness of an organization's financial statements. Studies generally accepted auditing standards, auditors' opinions, internal control, and ethical, legal, and professional responsibilities of auditors. *Prerequisites: Acct. 415 and 425.*

Acct. 477 Senior Seminar 2 hours

A capstone course integrating the student's background, experiences and previous curriculum in accounting. *May not be taken before senior year.*

Acct. 490 Senior Project 2 hours

Open only to students with a field of concentration in accounting. Preparation of the senior project and its presentation. *The topic for the senior project must be approved by the Head of the Economics and Business Department.*

Astronomy

(See General Science 201 Astronomy)

Biology

Aims

To acquaint students with the living world around them and with basic life processes; to demonstrate the scientific method as an approach to problem solving; to cultivate an appreciation of research; to develop laboratory skill in various types of work in biology; to prepare students as teachers of biology and for professional fields such as medicine, dentistry, veterinary medicine, and for graduate schools in various biologic disciplines; and to help students find and appreciate their role in the natural environment.

Requirements for Field of Concentration

A minimum of 40 semester hours in the department including the Senior Project. A minimum of 16 semester hours in chemistry, including two semesters of organic chemistry. Eight hours of physics are also required. German or French is recommended for those students preparing for graduate school. A semester of calculus is also strongly recommended. Statistics is recommended for students preparing for graduate work in ecology, wildlife biology, genetics and certain other fields.

Biology majors must complete Bio. 100, Bio. 180, Bio. 280, Bio. 290, and Bio. 308. In addition each major must choose 4 semester hours from each of the following three groups:
Bio. 343, Bio. 425, Bio. 467;
Bio. 228, Bio. 231, Bio. 326;
Bio. 440, Bio. 442



Requirements for Biology as a Second Teaching Field

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach biology in the secondary schools: Bio. 100, Bio. 180, Bio. 280, Bio. 167, or Bio. 308, Bio. 290, Bio. 326, or (Bio. 228 and Bio. 231), Chem. 101, Chem. 102, G.S. 480. See Education Department listings for required professional education courses. Biology majors seeking certification must complete the requirements listed above for biology as a field of concentration as well. A second teaching field is required. G.S. 480 is required for state teacher's certification in biology even if the student has taken Ed. 480 in humanities or social science.

Bio. 100 Modern Concepts in Life Science 4 hours

An introduction to modern concepts of cell biology, metabolism, photosynthesis, nutrition, reproduction, heredity, evolution, behavior, and ecology, emphasizing the process of acquiring biological knowledge. Consideration is given to social and ethical implications of biological issues.

Bio. 102 Horticultural Science 2 hours
Examination of the scientific concepts on which horticulture is based. Emphasis is placed on the study of the plant, the basis of all horticultural activities.

Bio. 105 First Aid as Related to the Principles of Biology 2 hours
Major emphasis is placed on the biological principles utilized in the standard first aid and personal safety course of the American Red Cross. Red Cross certificates may be earned by those passing the examination. Opportunity for instructors' certificates will be presented as an option at the end of the course. (May be taken for credit as Physical Education 226.)

Bio. 167 Introduction to Mammalian Anatomy and Physiology 4 hours
Mammalian anatomy as exemplified in the cat. Discussion and study of the functioning of the tissues and organ systems of the human body, lab study of the anatomy of the cat, the human physiology. *Not open to biology majors. Prerequisite: Bio. 100.* (May be taken for credit as Physical Education 167.)

Bio. 180 Invertebrate Zoology 4 hours
A structural, functional and evolutionary study of the major invertebrate phyla.

Bio. 205 Emergency Medical Training 4 hours
The medical, communication, transportation records, and report instructions required for certification by the West Virginia Department of Health as an emergency medical technician. *Red Cross advanced first aid certificates may be earned by those passing the examination.*

Bio. 210 Evolution 2 hours
Evidence for the theories of evolution with special attention to the modern synthesis of genetic and ecological factors. *Prerequisite: An elementary course in biology or permission of the instructor.*

Bio. 228 Field Botany 2 hours
Introduction to the taxonomy of vascular plants with emphasis on the local flora, including the techniques of herbarium science.

Bio. 231 Ornithology 2 hours
Anatomy, behavior, and identification of birds.

Bio. 250 Biological Rhythms 2 hours
Circadian and other rhythms are studied in living organisms including humans. An emphasis is placed on the physiological and behavioral aspects of rhythms.

Bio. 280 Botany 4 hours
A study of plant life including the evolution of the various groups of plants, the morphology and anatomy of vascular plants, and the fundamental life processes of plants.

Bio. 290 General Genetics 4 hours
A synthesis of basic principles and modern molecular theory.

Bio. 308 Comparative Vertebrate Anatomy 4 hours
Comparative anatomy of the representative forms of vertebrates; lab study of the comparative anatomy of the shark, other lower vertebrates, and the cat.

Bio. 314 Introduction to Biochemistry 4 hours
(See Chemistry 314.)

Bio. 326 Ecology 4 hours
Study of the general principles of ecology of microorganisms, plants and animals. Special emphasis is placed on field study of several communities. *Prerequisites: Bio. 100 and Bio. 101 or permission of the instructor.*

Bio. 343 Microbiology 4 hours
Morphology and physiology of microorganisms; principles of lab technique; cultural characteristics and environmental influences on microbial growth.

Bio. 425 Animal Physiology 4 hours
Structure and functions of the human body; the mechanism of bodily movements, responses, reactions, and various physiological states.

Bio. 440 Histology-Microtechniques 4 hours
Structure of the cell, its modification into various tissues, and the practice of general histological techniques.

Bio. 442 Embryology 4 hours
Study of the ontogenetic development of selected embryos. Major emphasis is on the vertebrates.

Bio. 451 Endocrinology 4 hours
A study of the various endocrine glands and their hormonal regulation of diverse physiological functions in health and disease.

Bio. 467 Cell Physiology 4 hours
Introduction to the structural organization of cells and the important aspects of cell physiology in the light of modern biochemistry and biophysics. *Prerequisites: Chem. 211-212 or permission of the instructor.*

Bio. 480 Methods and Materials in Teaching Physical and Life Sciences 4 hours
For course description see General Science 480. (May be taken for credit as Education 480.)

Bio. 487-488 Independent Study 2 or 4 hours each

Bio. 490 Senior Project 2-8 hours
Starts the first semester of the junior year and is to be completed in the spring semester of the senior year.

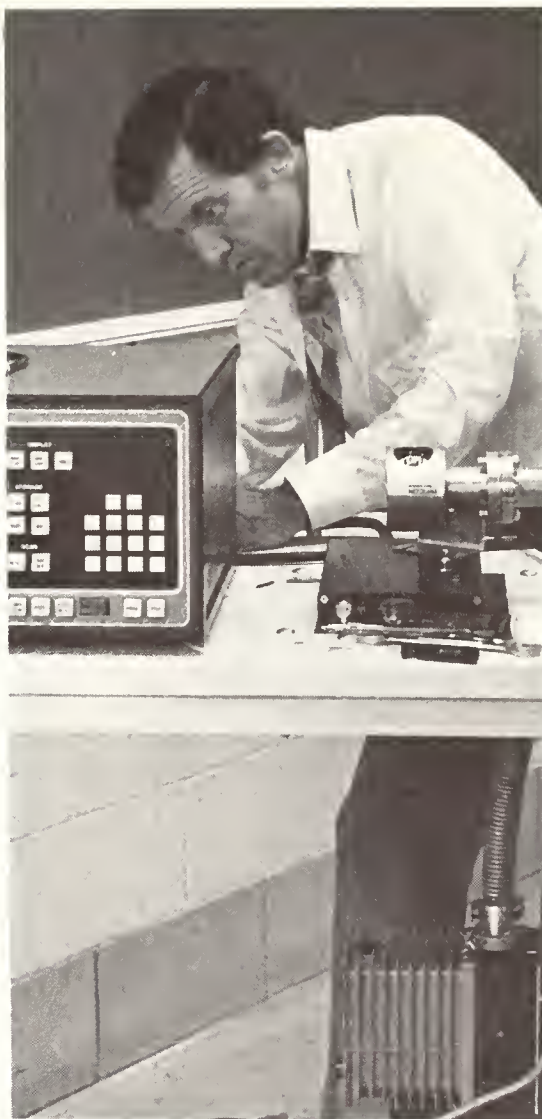
Chemistry

Aims

To contribute to the student's general knowledge and understanding of the nature of the physical world and his or her understanding of the place of chemistry in industrial and business life; to provide experience in the scientific method of reasoning; and to provide students concentrating in this field with a thorough and practical education in chemistry which may be useful in industrial, technical, and graduate work.

Requirements for Field of Concentration

A minimum of 38 hours in the department exclusive of the Senior Project. The distribution must include Chemistry 101, 102, 211, 212, 226, 324, 326, 404, 414, plus four hours of electives and at least two hours of Senior Project; Mathematics 201, 202; Physics 201, 202; and at least two hours from the group of Computer Science 142, 150; Physics 221, 222, 300; Mathematics 203, 341. Students who plan to do graduate work in chemistry will demonstrate a reading knowledge of chemical German, French, or Russian. Additional courses in mathematics are also strongly recommended. All courses in chemistry as well as the indicated courses in mathematics and physics must be taken for a letter grade.



The program of study is consistent with the most recent standards of the American Chemical Society.

The entering freshman who is interested in chemistry should select Chemistry 101 and mathematics at the appropriate level. Programs for subsequent semesters must be decided in conference with the faculty advisors for chemistry. Students planning to take the MCAT are strongly advised to take a course in the history of the fine arts during their fourth or fifth semesters.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach Chemistry in secondary school: Chem. 101, 102, 211, 212, 226, Physics 201, 202, G.S. 480, and

select four hours from the following: Chem. 224, 314, 323, 402, 414. See Education Department listings for required courses in Professional Education. A second teaching field is required.

Chem. 100 Consumer Chemistry 4 hours
(See General Science 100.)

Chem. 101 General Chemistry 4 hours
Study of theoretical and descriptive inorganic chemistry. The laboratories provide students with experience in basic laboratory manipulations, problem solving and testing of hypotheses. Three lectures and three hours of lab per week. *Prerequisites:* Two units of high school algebra or concurrent enrollment in Math. 103.

Chem. 102 General Chemistry 4 hours
Continuation of the lecture portion of Chem. 101. Study of solubility and acid-base phenomena in aqueous systems with appropriate lab work. *Prerequisite:* Chem. 101.

Chem. 211-212 Organic Chemistry
4 hours each

Introduction to the study of the organic compounds of carbon, both aliphatic and aromatic, involving a considerable amount of the electronic mechanisms of organic reactions. Lab work consists largely of organic preparations. *Prerequisites:* Chem. 101, 102. Three lectures and three hours of lab per week.

Chem. 226 Physical Chemistry I 4 hours
Introduction to the concepts and experimental techniques of classical thermodynamics with special emphasis on the concepts of enthalpy, entropy and free energy. A study of the different energy states of atoms and molecules. The statistical principles governing the distribution of particles within these states and the transitions between states. *Prerequisite:* Chem 102.



Chem. 311 Bonding and Symmetry in Organic Chemistry 2 hours

Introduction to group theory and simple molecular orbital calculations as they apply to organic chemistry and to the spectra of organic compounds. Emphasis is placed on problem solving and structural determinations from spectroscopic data.

Prerequisite: Chem. 226 or permission of the instructor.

Chem. 314 Biochemistry 4 hours

The chemistry of fundamental biological reactions with an emphasis on structure-function relationships, metabolic pathways, and the regulation of biochemical processes. The laboratory provides an introduction to the modern experimental techniques of biochemistry. *Prerequisite:* Chem. 212. (May be taken for credit as Biology 314.)

Chem. 324 Analytical Chemistry 4 hours

The study of principles of acid-base, oxidation-reduction, and solubility phenomena associated with solutions. Classical and modern applications of these principles to the analysis of unknowns will be performed in the laboratory. *Prerequisite:* Chem. 102.

Chem. 325 Chemical Instrumentation 2 hours

The theory and practice of selected methods in chemical instrumentation. Special emphasis will be placed on those methods not covered in other courses and on methods helpful for completion of Senior Projects. *Prerequisite:* Chem. 226.

Chem. 326 Physical Chemistry II 4 hours

Study of rate processes, especially in the liquid phase, and consideration of special problems associated with the liquid and solid states.

Chem. 404 Advanced Inorganic Chemistry 4 hours

A systematic discussion of the important phenomena of modern inorganic chemistry to include bonding and structure, kinetics, thermodynamics, acid base theories and physical methods. Transition metal and organometallic chemistry are examined along with the chemistry of selected representative elements. *Three lectures and three hours of lab per week. Prerequisite:* Chem. 326.

Chem. 411 Physical Organic Chemistry 2 hours

Study of the theories and techniques relating structure and properties of organic compounds. *Prerequisites:* Chem. 212, Chem. 226 or permission of the instructor.

Chem. 414 Advanced Organic Chemistry 2 hours

Study of selected advanced topics in organic chemistry including reaction mechanisms. Lab is introduced, where appropriate, and stresses the use of instrumentation.

Prerequisites: Chem. 212; Chem. 226 or permission of the instructor.

Chem. 430 Special Topics 2 hours each

Series of three courses devoted to the consideration of advanced topics and areas of special interest in the fields of Inorganic Chemistry (430-A), Organic Chemistry (430-B), and Physical Chemistry (430-C).

Prerequisite: Permission of the instructor.

Chem. 475 Polymer Science 4 hours

A study of the methods of synthesizing, isolating and characterizing polymers. The course includes the study of organic, inorganic and biological polymers. Laboratory will involve the characterization of electrical, optical, thermal, molecular, and mechanical properties.

Chem. 477-478 Seminar in Chemistry 2 hours

Presentation of current research topics by students, faculty and visiting lecturers.

Chem. 480 Methods and Materials in Teaching Physical & Life Sciences 4 hours

For course description see General Science 480. (May be taken for credit as Education 480.)

Chem. 487-488 Independent Study 2 or 4 hours each

Chem. 490 Senior Project 2-6 hours

During the junior year the chemistry major is introduced to the methods of employing the chemical literature, selects a topic for advanced investigation, and makes a literature search of background material as a basis for an in-depth study in this area. There is one class meeting each week for both semesters. Following this preliminary work, an investigation of a significant topic in chemistry is made by each senior under the direction of a faculty member in the department. This work culminates in a written and oral report at the end of the senior year. *Fee:* \$20.



Communications

Aims

To prepare students to work in the media or with the media by studying the fields of broadcasting, advertising, public relations, or print media; to prepare students to enter the professional world of communications through courses emphasizing communication skills and others focusing on the structure of the media and their effects and impacts on individuals, groups and cultures; to instill a sense of ethical and legal responsibility among future professional communicators.

Other students use the general communications curriculum to prepare for law, teaching, business management and other closely related fields.

Requirements for Field of Concentration

Communications 101, 201, 206, 304, 403, 420; either 204 and 303, or 261, 271, 310; either 401 or 403; either 301 or 302.

In addition, students will complete a Senior Project, take 12 hours in English courses and/or foreign language literature courses, take Philosophy 124, and achieve a proficiency in a foreign language at the 230 level.

Normally students are expected to complete the required communications courses in the following order: freshman year—101, 206; sophomore year—201, 204, or 261-271, 301 or 302; junior year—303 or 310, 304, 401 or 402; senior year—420, 490.

Appropriate courses outside the department, including Core Programs, can be recommended by advisors in the Communications Department.

It is recommended that a student in the department complete one of the following voluntary tracks: Print Media—204, 295, 303, 306; Public Relations—302, 320, 325, 405; Advertising—301, at least 8 hours from 383, 384, 385, 404, 406; Broadcasting—261, 271, 310, 311, at least 2 hours from 272, 361, 371.

Advisors in the department can recommend for each track 4–6 hours of additional specialized Communications electives, generally taken in the junior and senior years.

Students must have achieved at least sophomore standing for enrollment in any of the 300- and 400-level courses in the department.

Comm. 101 Introduction to Mass Communications 4 hours

History and theory of mass communications. Role of newspapers, magazines, radio, television, books, movies, and adjunct agencies in modern society. Effects on audiences.

Comm. 201 Beginning Reporting 4 hours

Study and practice of basic journalistic writing skills, including grammar and sentence construction as they relate to news writing. Basic reporting skills will be emphasized. A typing speed of 35 words per minute will be required to pass this course.

Comm. 204 Copy Editing and Layout 4 hours

Principles and practice in editing copy for publications; includes typography, layout, design of letterpress and offset newspapers, and use of computers. *Prerequisite: Comm. 201.*

Comm. 206 Interpersonal Communication: Public Speaking 4 hours

Introduction to the dynamics of communication: levels of interaction between speaker and listener. Developing the use of voice and non-verbal signals; understanding oral style in language and logical argument in public speaking. Focus on the design and delivery of short speeches and on critical listening. (May be taken for credit as Fine and Applied Arts 203.)

Comm. 220-J Caribbean Journalism

2 hours

Study of the mass media and their impact economically, socially, politically, religiously, and educationally on the various Caribbean groups. The course deals with the media in the Virgin Islands, Puerto Rico, Cuba, Haiti, Dominican Republic, and the Caribbean Commonwealth nations. *January term only.*

Comm. 261 Radio Production 2 hours

Basic audio production and performance techniques for radio. Laboratory experience in the WVBC radio studios.

Comm. 271 Basic Television Production 2 hours

Basic video production and performance techniques, both in studio and on location. Topics include studio operations, camera operation, floor direction, remote production techniques and videotape recording technology. *Prerequisite: Comm. 261.*

Comm. 272 Intermediate Television Production 2 hours

Intermediate video production and performance techniques. Laboratory experiences in technical direction, program direction, video editing and script writing. Leadership skills developed through instruction on production personnel management and budgeting. *Prerequisite: Comm. 271*

Comm. 295 Publication Photography 4 hours

Introduction to the knowledge, skills, and techniques needed to produce quality black-and-white photographs for publication. Course covers both visual communication techniques and basic design and aesthetic concepts. Emphasis is on learning to meet specific news and other publications' photographic requirements effectively. *Two lectures and one four-hour lab per week. Prerequisites: Comm. 201 and junior standing.*

Comm. 301 Principles of Advertising

4 hours

Study of history, philosophies and principles of advertising. Media, markets and merchandising. Role and evaluation of advertising. Stress on copy writing and layout.

Comm. 302 Principles of Public Relations 4 hours

Study of public relations as a process involving research, planning, communication and evaluation. Analyzing publics and influencing their opinions. History, contributions, effects, laws and ethics of the field. Development of a public relations plan for an organization.

Comm. 303 Advanced Reporting 2 hours

Continuation of and building on the skills introduced in Beginning Reporting. Emphasis on reporting techniques, development and use of news sources and writing of various types of stories. *Prerequisite: Communications 201.*

Comm. 304 Law of Mass Communications 4 hours

Study of the legal rights and limitations of the mass communications media in the United States.

Comm. 306 American Magazines 2 hours

Role and contributions of U.S. magazines, historically and currently. Trends in writing style, editing, production, layout, advertising, promotion, reader research, and circulation. Practice in writing three articles for a professional journal and general circulation magazines.

Comm. 310 Advanced Broadcast News Reporting 2 hours

A lecture-laboratory course dealing with the complexities of the electronic news gathering process. Emphasis on the use of state-of-the-art technology and its affects on news content and story organization. Field trips to local stations and guest speakers from the media. Students will be required to gather and report news using the technology associated with radio, television and cable. *Prerequisites: Comm. 201, 271.*

Comm. 311 Broadcast Management

4 hours

Managing the radio/television station including administration, sales, promotion and programming, with applications to network, cable and public broadcasting.

Comm. 320 Public Relations Writing

2 hours

Practice in the styles of writing used in public relations, including publicity, publications copy, scripting for audio and audio/video productions and public relations advertising.

Prerequisite: Comm. 302.

Comm. 325 Public Relations Case**Problems** 2 hours

Application of the principles of public relations to actual and hypothetical cases. Consideration of practical, ethical and legal implications of decisions made while managing public relations operations. *Prerequisite: Comm. 302.*

Comm. 340-345 Special Topics in Mass Communications 2 or 4 hours**Comm. 350 Persuasion** 4 hours

Concentrated study of persuasion theory. Topics include; learning theory, consistency theories, social judgment theory, motivation, the enthymeme, counterattitudinal advocacy, role-playing and inducing resistance to persuasion. *Prerequisite: Comm. 206.*

Comm. 355 Advanced Public Speaking

4 hours

Focuses on specific types of speeches and rhetorical situations. Special emphasis is given to speechwriting and to the actual delivery settings for these speeches. Speeches include: introduction, nomination and acceptance, eulogy, after-dinner, impromptu, question response, sales presentation, reports, etc. *Prerequisite: Comm. 206.*

Comm. 361 Advanced Radio Production

2 hours

Advanced production and performance techniques for the radio broadcaster. Laboratory experiences in the WVBC radio studios. *Prerequisite: Comm. 261.*

Comm. 371 Advanced Television**Production** 2 hours

Integration of the technical and creative skills necessary for broadcast television production, both in studio and on location. Definition of creativity and its role in broadcast television.

Prerequisite: Comm. 272.

Comm. 383 Advertising Creativity 4 hours

Principles and practices of writing copy for the print and electronic media. *Prerequisite: Comm. 301.*

Comm. 384 Advertising Media Buying

2 hours

Study of the process of developing an advertising media plan. Extensive analysis and use of audience and marketing data for the print and broadcast media. *Prerequisite: Comm. 301.*

Comm. 385 Advertising Media Selling

2 hours

Theory and techniques of selling print and broadcast media to advertisers. Salesmanship, including presentation techniques. *Prerequisite: Comm. 301.*

Comm. 401 History of American Mass Communications 4 hours

History of newspapers, magazines, books, radio and television as well as the related areas of public relations and advertising in the United States.

Comm. 402 Public Opinion 4 hours

The nature and significance of public opinion. Includes studies of public opinion formation and measurement, the roles of news media, advertising, censorship, propaganda, political indoctrination, and other factors.

Comm. 403 International**Communications** 2 hours

Comparative media systems: theory and practices in print and electronic media, advertising, public relations and journalism education in Europe, Asia, Latin America, the Middle East and Africa.

Comm. 404 Direct Response Advertising

2 hours

Study of theory and techniques of direct response advertising and promotion. Preparation of an original project and/or service of a profit or non-profit institution. *Prerequisite: Comm. 301.*

Comm. 405 Public Relations Campaigns

2 hours

The handling of an organization's public relations program or an organization's special public relations campaign, including researching and analyzing the public relations situation, planning the program or campaign, and developing the various communications tools to be utilized. A competitive public relations agency model is used. *Prerequisite: Comm. 320 or 325.*

Comm. 406 Advertising Campaigns

4 hours

Development of an advertising campaign including situation analysis, strategic advertising plan and some execution of specific creative and media tactics. A competitive agency model is used. *Prerequisite: Comm. 301, 383, or 384.*

Comm. 420 Professional Internship

2 hours

Professionally supervised experience with an off-campus media organization or a communications agency. Assignments will allow for application of classroom materials and campus media experiences and will be similar to those experienced by new communications professionals. *Minimum of 160 hours required. Generally taken as a senior. Prerequisites: Two on-campus media experiences and a professional observation. (Details about prerequisites available from the Department of Communications.)*

Comm. 487-488 Independent Study 2 or

4 hours each

Comm. 490 Senior Project 2-8 hours

Communication Design

(See Fine and Applied Arts 302, 303, 304, 404, 405, and 406.)



Computer Science

Aims

To help students 1) recognize problems that can be solved with the aid of a computer; 2) write structured programs in a reasonable amount of time that work correctly, are well documented, and readable; 3) determine whether or not they have written an efficient and well organized program; 4) assess the implications of work performed either as an individual or as a member of a

team; 5) understand basic computer architectures; 6) understand how the process of modern operating systems cooperate and compete with each other as they perform their functions. To prepare students to 7) pursue in-depth training in one or more application areas of computer science; 8) further their education in computer science; 9) gain employment in some computer related capacity.

Two Plans of Concentration

Two plans of concentration are offered—one leading to the Bachelor of Arts degree and the other to the Bachelor of Science degree.

The Bachelor of Arts plan is designed for those students seeking a career in computer science in a business environment.

The Bachelor of Science plan is designed for science students seeking a career in computer science in perhaps a scientific lab or in a software development firm.

Requirements for the Bachelor of Arts Degree

The Bachelor of Arts degree requires Computer Science 100, 144, 201, 202, 290, 370, 380, 478 plus a Senior Project; Mathematics 201, 281; Economics and Business 200, 280, 312; English 209. In addition, the faculty strongly recommends Accounting 211, 212, and 425. Other recommended courses are Communications 206, 301, 302; General Sciences 210; and Philosophy 124. Beginning students are expected to complete Computer Science 201 and Mathematics 201 in their first semester.

Requirements for the Bachelor of Science Degree

The Bachelor of Science degree requires Computer Science 201, 202, 210, 222, 280, 290, 330, 370, 380, 478, one additional 300 or 400 level course, plus a Senior Project; Mathematics 201, 202, 383; Physics 201, 202. Beginning students are expected to complete Computer Science 201 and Mathematics 201 in their first semester.

CS 100 Computers and Society 2 hours

The impact of computers and computer systems on society is studied. Current topics such as the following are covered: the impact of computers on employment; automation and the labor force; overview of computer applications in government, medicine, education, etc.; social issues – ethics, information banks, privacy and the Freedom of Information Act, computer abuses; the future – a cashless society and computers in the home. (May be taken for credit as Sociology 105.)

CS 140-150 Introduction to Programming
2-4 hours each

The following courses provide an introduction to computers by programming in a high level language on the Prime computer. The emphasis is programming real-life problems using efficient coding techniques. These courses are directed towards the student who wants to use the computer as a problem-solving tool.

CS 140 Introduction to Programming Using BASIC 2 hours

This course is directed toward the non-science student. Not recommended for students who have successfully completed any other computer language course.

CS 142 Introduction to Programming Using FORTRAN 2 hours

The programming assignments in this course will involve applications to science problems.

CS 143 Introduction to Programming Using PL 1 4 hours

Programming assignments in this course will involve applications to science problems.

CS 144 Introduction to Programming Using COBOL 4 hours

Programming assignments in this course will involve applications to business problems.

CS 145 Introduction to Programming Using RPG II 2 hours

Programming assignments in this course will involve applications to business problems.

CS 150 Programming for Science Applications 4 hours

This course will teach methods of structured programming and will use both FORTRAN 77 and PASCAL as computer languages. All programming will involve scientific applications. *Prerequisite: Permission of instructor.*

CS 200 Computer Applications in the Social Sciences 2 hours

A study of computer techniques applied to social and behavioral sciences. Topics include language selections, matrix manipulation, statistics (basic), analysis of variance, correlations and regression, econometrics, and profit analysis packages.

CS 201 Computer Science I 4 hours

This beginning course for computer science majors may also be taken by others who wish to learn the language. The emphasis is on techniques of algorithm development, structured programming and debugging techniques as they apply to the PASCAL language.

CS 202 Computer Science II 4 hours

An introduction to operating systems, data structures and computer organization and files. The data base management system INFO by Henco will also be discussed. The programming assignments will provide the students with advanced features of PASCAL and an introduction to PL1, another structured language. *Prerequisite: CS 150 or CS 201.*

CS 222 Digital Electronics 4 hours
(See Physics 222.)

CS 280 Assembly Language 4 hours
A study of assembly language programming methods. Topics include computer organization, assembly process, assembly coding, addressing, binary arithmetic, storage allocation, character and bit manipulation, and debugging techniques. *Prerequisite: CS 202.*

CS 290 Data Structures 4 hours
Basic data concepts and their representation. Linear lists, strings and string processing, algorithms, and arrays. Storage allocation and representation of arrays. Storage systems and structure, and storage allocation and collection. *Prerequisite: CS 202.*

CS 310 Discrete Structures 4 hours
Fundamental algebraic, logical, and combinational concepts of computer science. Topics include graph theory, monoids and finite automata, lattices and Boolean algebras.

CS 330 Computer Organization 4 hours
Application of Boolean algebra to combinational circuit design problems. Organization of simplified computer components. Adders, arithmetic and logical units, memory organization. Architecture and physical realization of computer systems. *Prerequisite: CS 202.*

CS 370 Operating Systems 4 hours
Batch processing systems. Implementation techniques for parallel processing of input/output and interrupt handling. Memory management, system accounting, interprocess communication and interfaces, and deadlocks. *Prerequisite: CS 280.*

CS 380 Introduction to Data Base Design 4 hours

This course presents an in-depth study of the design and the implementation of a data base. Topics include architecture of a data base, the three approaches (relational, network, and hierarchical) to a data base. Also included is some experience with INFO, a relational data base package by Henco. *Prerequisite: CS 290.*

CS 390 Numerical Analysis

4 hours
(See Mathematics 390.)

CS 400 Interactive Computer Graphics 4 hours

A study of graphics on the microcomputer using Turtle Graphics and the UCSD PASCAL. *Prerequisite: One high level language other than BASIC.*

CS 410 Computer Simulation 2 hours

Simulation methodology including generation of random numbers and variates, analysis of data generated by simulation experiments, and validation of simulation models. Introduction to queuing theory. Selected simulation applications.

Prerequisites:

Math 383.

CS 450 Data Base Concepts 2 hours

Introduction to the concept of a data base. Topics include data organization and structure data security. Also discussed will be a comparison of data base approaches and access methods. Some programming assignments will be given in INFO, the data base management system on our PRIME. *Prerequisite: CS 202.*

CS 460 Programming Language Structures 4 hours

This is a course in programming language constructs emphasizing the run-time behavior of programs. Topics include: formal grammars, parsing, information binding, data storage, global and local variables and parameters, string handling and list processing. *Prerequisite: CS 202.*

CS 478 Senior Seminar 2 hours

Current topics in computer science.

CS 482 Computers in Education 2 hours

Students will become familiar with the microcomputers and some software available for classroom use. Methods for evaluating software will be discussed. Students will design classroom applications using LOGO or some other software package. *Prerequisite: Permission of Instructor.*

CS 487/8 Independent Study 2 or 4 hours

CS 490 Senior Project 2-8 hours hours

Economics & Business

Aims

To help students develop a broad foundation of knowledge in business and the liberal arts in order that they may act intelligently and effectively in the business environment. Specific emphasis will be placed on cultivating the ability to apply knowledge and develop proficiencies in the use of analytical tools for problem-solving in business, government and society. The courses offered serve as preparation for work in business, government, law, public service and graduate study. Students in the department have access to a technologically equipped lounge/seminar room in Old Main for the study of economics and public policy furnished by a gift from Mrs. Kathryn Stanley Dohr in memory of her late husband, James Dohr.

Requirements for Field of Concentration

A minimum of 26 hours of courses in the department exclusive of the Senior Project. Required courses are: Econ. 200, 280, 290, 301, 302, 312, and 477. Related required courses are: Accounting 211 and 212, Mathematics 201, 281, and 282, and four credit hours from Computer Science 142, 143, 144, 145, and 200.

Students considering economics as a field of concentration should complete by the end of the sophomore year: Econ. 200, Acct. 211 and 212, Math. 201 and 281. Students with a concentration in Economics and Business are limited to 12 hours in Accounting beyond the required courses (Acct. 211, 212).



Students concentrating in Economics and Business are expected to attain a minimum grade of "C" in all courses in the department. If a student receives a grade lower than a "C," the student must arrange an interview with the head of the department prior to taking additional upper-level courses.

Econ. 101 Personal Finance 4 hours
To develop an understanding of the concepts needed for intelligent consumer decision-making. Budget policies, borrowing, installment buying, marketing techniques, and consumer purchases in the areas of food, clothing, automobiles, housing, social insurance, personal insurance, pension programs, investment markets, and estate building. (*Not recommended for students with a field of concentration in Economics and Business.*)

Econ. 111 Introduction to Business 2 hours
Structure, procedures, and objectives of the business system; economic and social environments of business; role of business in our culture.

Econ. 200 Principles of Economics 4 hours
Fundamental concepts, principles and problems of modern economics. Alternative methods of settling economic questions, with special emphasis placed on the functioning of the market system. Pricing, output determination, monopoly power, wage controls, and price fixing in relation to contemporary issues. The student is also introduced to problems of money and banking, growth, the labor movement, and business operations. Students will read broadly from non-technical literature as well as conventional text materials.

Econ. 280 Management 4 hours
Study of the management process; planning, organizing, staffing, controlling, decision-making and group dynamics. Introduction to organizational behavior theory. *Prerequisite: Econ. 200.*

Econ. 284 Operations Management 4 hours
Study of operations that use human, material and energy resources to create products and services. A system approach will emphasize that all parts of the conversion process are interrelated and that the principles can be applied to many kinds of organizations. Analytical, mathematical and decision-making skills will be developed. *Prerequisites: Econ. 200, Math 201, 281.*

Econ. 286 Personnel Management 4 hours
An examination of personnel management as a dynamic network of processes, systems, and conditions that affect all organizations and the people in them. In particular, the course treats extensive application of theory, research, and practice to job design, staffing, training and development, appraisal compensations, leadership, organizational justice, and collective bargaining. *Prerequisite: Econ. 200*

Econ. 287 Organizations and Human Behavior 4 hours
This course seeks to improve effectiveness of organizations by strengthening human processes. It explores specific aspects of organizational culture such as motivation, conflict, power, and leadership; exercises and simulations are emphasized. (May be taken for credit as Psychology 287.)

Econ. 290 Principles of Marketing 4 hours
Marketing function of the manufacturer, wholesaler, jobber, retailer, mail order-house, chain store and other marketing institutions; cost of distribution; problems of marketing management and planning; and modern trends in marketing. *Prerequisite: Econ. 200.*

Econ. 300 Business and Society 4 hours
Interface of business with government and society; management action in situations involving significant political and social factors; the changing role of business. *Open only to juniors and seniors.*

Econ. 301 Price Theory 4 hours
Advanced study of resource allocation, price determination, output determination, and income distribution at the level of the individual firm under various market conditions. Mathematical analysis and model building will be used, whenever appropriate. *Prerequisites: Econ. 200, Math 201, 281.*

Econ. 302 Public Economic Policy 4 hours
Advanced study of the determinants and behavior of the national economy which will include consideration of production, employment, and price levels. Mathematical analysis and model building will be used whenever appropriate. *Prerequisite: Econ. 200.*

Econ. 312 Managerial Finance 4 hours
Corporate organizations and the planning of financial requirements. Intensive study of cash flow, budgeting, capital decisions, internal financing, and corporate reorganization. *Prerequisites: Acct. 212, Econ. 200, Math 281.* (May be taken for credit as Accounting 312.)

Econ. 316 Money, Banking, and Fiscal Policy 4 hours
Various money markets; the operation of commercial banks, Federal Reserve System, and the Treasury Department including an analysis of tax revenues, expenditures, and debt-financing. *Prerequisite: Acct. 212.*

Econ. 325 Investment Management 4 hours
Critical study of the various types of investment instruments and the relative merits of each, investing procedures, security analysis, security ratings, portfolio theories, and portfolio analysis. *Prerequisites: Acct. 212, Econ. 200, Math 281.*



Econ. 330 Business Law 4 hours
Introduction to the nature and development of law, the legal aspects of contracts and other business instruments as set forth in the Uniform Commercial Code, and some aspects of partnerships and corporations. (May be taken for credit as Accounting 330.)

Econ. 341 Labor Problems 4 hours
General course in labor economics, with an emphasis on trade unionism; history and objectives of organized labor; employment and wage theory; managerial labor policies; collective bargaining; current social, economic and political aspects of labor management relations; and labor law. *Prerequisite:* Econ. 200.

Econ. 360 International Trade and Transnational Marketing 4 hours
Principles of international trade and finance and their application to the modern world; emphasis on transnational marketing strategies, problems and issues; theory of comparative advantage; exchange rates, monetary standards, tariffs, quotas, and commercial policy; capital movements; aid to less developed countries; geographic origin and direction of trade routes and products. *Prerequisite:* Econ. 200.

Econ. 399 Problems in Business Administration 2 or 4 hours
Selected management problems related to the total enterprise and emerging technology; managerial and corporate strategy, utilization of resources, functional disciplines of management. *Prerequisites:* Econ. 200, 280.

Econ. 470 Internship in Management 4-8 hours
An extensive off-campus learning experience in a management setting, involving off-campus work and a substantive written project. Approval by the department of both the work experience and the academic project must be jointly supervised and evaluated by a member of the faculty and an approved off-campus mentor.

Special opportunities and arrangements are in place for internships and in the hospitality management field. These include work experience in major resorts, food management firms, large hotel/motel chains. To choose this option the student must have completed at least one semester of off-campus work in a Bethany hospitality facility; and it is recommended that the following courses be taken: Economics and Business 330, Communications 301 and 302, English 205, and Accounting 425 in addition to field of concentration requirements in the department. *Prerequisites:* Junior standing and departmental approval.

Econ. 477 Senior Seminar 2 hours
A capstone course integrating the student's background, experiences and previous business and economics curriculum through case studies and simulation exercises.

Econ. 487-488 Independent Study 2 or 4 hours each

Econ. 490 Senior Project 2-8 hours
Open only to students with a field of concentration in the department. Preparation of the senior project and its presentation. Time will also be devoted to review for the senior comprehensives. The topic for the senior project must be selected before the end of the junior year and be approved by the head of the department.

Education

Aims

To develop a teacher who is a self-directed decision maker who recognizes the need for personal and professional growth, has the skills necessary to pursue it, and is secure enough to engage in personal and professional self-evaluation.

To develop a teacher who can recognize the needs of young people and utilize the liberal arts background, content preparation, and the principles of education in attempting to meet those needs and facilitates the acquisition of knowledge for that purpose; a teacher who can provide an educational environment to enhance the development (social, emotional, cognitive and physical) of individuals so that they may make sense of their world and make decisions effectively within that world.

To develop a teacher who can interact effectively within the community and school environment and has the skill and willingness to communicate with people of all ages and backgrounds.

To develop a teacher who also analyzes emerging trends and thinks critically about them in an attempt to arrive at a human balance between the needs of the child, the needs of society, and personal needs in order to perform effectively and ethically.

In summary, to develop a teacher who is a perceptive and aware person who can utilize intellectual skills and knowledge to think critically and pursue self-directed goals.

Requirements for Teacher Certification

A student preparing for certification must plan to complete: (1) the requirements for graduation as described on Page 20, (2) the testing program required by the West Virginia



Board of Education in the areas of reading, mathematics, writing, speaking and listening, (3) a selection of courses providing appropriate background for teaching in a particular field, (4) a sequence of professional education courses and experiences designed to give broad understanding of concepts and skills in teaching.

Bethany is accredited by the National Council for the Accreditation of Teacher Education (NCATE) and is a party to the interstate compact for reciprocity in certification through the West Virginia Board of Education approval of all certification programs offered at Bethany College.

To become eligible for teacher certification, the student must complete a college and state-approved program. It is the student's responsibility to seek appropriate counseling from the Education Department, preferably early in the freshman year, and to become familiar with all of the requirements. *A Guide to Teacher Education*, available in the Education Department Office, gives a full description of all programs.

The department recognizes abilities which students may already have in a given subject matter area and assists them in planning their program accordingly. Waivers or advanced standing granted by the College can be noted on official transcripts so that

courses from which a student is exempted may be applied toward certification.

Leadership of children and youth groups, e.g., summer camps, scouts, church school, playground supervision, etc., is strongly recommended.

A period of observation and participation in a school is an important and integral part of the education curriculum. Education students are encouraged to consider observation and participation in an educational agency when planning their intercultural and/or citizenship practicum.

Professional Education

Students preparing to teach at any level must complete the sequence of required professional courses. Required courses cannot be taken credit-no credit.

First Semester	Credit	Second Semester	Credit
Freshman			
Psych. 100 General Psychology	4		
Sophomore			
*Ed. 201 Human Development I	4	Ed. 202 Human Development II	4
		Ed. 242 Principles and Curriculum in the Public Schools	2
(Students must apply for admission to Teacher Education during Ed. 242)			
Junior			
Appropriate methods course(s)	2-4	Ed. 348 Professional Practicum	4
		Appropriate methods course(s)	2-4
(Students must apply for the Professional Year during Ed. 348)			
Senior Professional Block			
Sp. Ed./Psych. 410 Tests and Measurements	2	Ed. 340 Reading in the Content Areas	2
Ed./Sp. Ed. 470 Observation and Directed Teaching	8		
Ed. 401 History and Philosophy of Education	2		
Appropriate methods seminar(s)	4		

No Other Courses Permitted

Elementary Education (K-8)

A student seeking certification to teach in the elementary school must follow the course of study for MULTI-SUBJECTS K-4 and 5-8. This allows the student to teach in the self-contained classroom. In addition to the Professional Education requirements listed, the student must take related, required courses. A complete listing of these courses is available from the Education Department and is contained in the *Guide to Teacher Education* (available from the department).

Students preparing to teach should discuss their program with the Head of the Education Department. Students are encouraged to pay special attention to Perspectives course choices. A Middle Childhood Specialization may be added to the elementary certificate if all requirements for both levels are met. Specific Learning Disabilities certification is also available to the student who wishes to teach in special education (see below).

The *Guide to Teacher Education*, available in the Education Department office, has specific information about required and related course work.

Specific Learning Disabilities (K-8)

Certification for teaching the child with specific learning disabilities is available as a specialization for the elementary certificate. Students who are interested in this area of special education must take the required special education courses in addition to the multi-subjects and professional education courses. Further information is available from the Education Department and is contained in the *Guide to Teacher Education*.



Middle Childhood Education (5-8)

Students preparing to teach in middle childhood settings (Middle School and Junior High Schools) will follow the Professional Education Sequence listed. They must choose two teaching fields from: Mathematics, Language Arts, Social Studies, General Science, French, German, Spanish, and Physical Education.

Students preparing to teach at the middle childhood level should discuss their program with the Head of the Education Department. Two teaching fields are required for a degree in education and certification in West Virginia. Middle Childhood certification may be added to elementary or secondary certification with the advisement and permission of the Education Department. A *Guide to Teacher Education* gives a full description of all programs leading to certification in West Virginia. The *Guide* is available in the Education Department.

Each student is responsible for planning a program for meeting certification requirements.



Secondary Education (9-12)

Students preparing to teach in secondary schools are expected to follow the sequence of required education courses listed in the Professional Education sequence. General distribution and other requirements for graduation, and the student's field of concentration, must be added. The required education courses cannot be taken Credit-No Credit.

Students preparing to teach at the secondary level should discuss their program with the Head of the Education Department, as well as the person

responsible for the Teacher Education Program in the major field. Students interested in French, German, Spanish, Mathematics, English, Social Studies, General Science and Physical Education must complete the Middle Childhood (5-8) program in their field. Physical Education candidates may plan for K-12 certification. A *Guide to Teacher Education* gives the full description of all programs leading to certification in West Virginia. The *Guide* is available in the Education Department.

Teaching fields include: Biology, Chemistry, Physics, General Science, French, German, Spanish, English, Physical Education, Social Studies.

Education (Non-School Settings)

The Education Department provides for a field of concentration, without public school certification, to allow students to prepare for a variety of roles in non-school settings, such as: 1) training program development and implementation in business and industry, 2) policy planning roles in state and federal agencies, and 3) higher education instruction in foundation areas.

Courses required are: Sp. Ed. 410; Education 201, 202, 242, 302, 348, 401, 475, 476, and 490.

In addition, each student will propose a program of study in one of the following areas of specialization: Human Resources Management and Training, Education Policy Planning, Educational Foundations, or other identified pre-professional areas of study within the discipline. Courses will be determined through the development of a program proposal based upon the student's career and study goals.

Bilingual-Bicultural Teacher Education

Bethany College, through the combined efforts of the Education Department and the Foreign Language Department, offers preparation for those students who might wish to teach young people whose first language is Spanish. While West Virginia does not offer certification in this area, many states do and a student completing the Bilingual-Bicultural sequence of courses would meet the requirements of most states. Students interested in this program should contact the Head of the Education Department and the Head of the Foreign Language Department for details regarding the program.

Psychology/Education Interdisciplinary Program

The Education Department and the Psychology Department offer an Interdisciplinary Degree for students interested in preparing for school and child related careers. Information concerning this program can be obtained from the Education Department or the Psychology Department.

Admission to Teacher Education

During Education 242 (Principles and Curriculum in the Public Schools), written application for admission to teacher education should be submitted to the Education Department on forms obtained from the department office.

The following criteria must be met to be admitted to the program:

1. Quantitative Skills Test (given to entering freshmen and may be retaken): 90 percent.
2. Nelson-Denny Reading Test (given to entering freshmen and may be retaken): 12.0 grade equivalent.
3. Grade Point Average: 2.25 overall, in education, and in proposed field of study.
4. Two positive recommendations from faculty and/or staff of Bethany College.
5. Positive recommendation by Education Department.

The student may be granted full admission, provisional admission, or may be denied admission. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Retention

A student must maintain the required level of performance and must show continued professional behavior. A student's qualifications may be reviewed at the end of any semester if such a review is deemed necessary.

Admission to the Professional Year

During Education 348 (Professional Practicum), each student must apply for admission to the professional year which includes student teaching. The following criteria must be met:

1. Successful scores on the Preprofessional Skills Test (reading, mathematics, writing).
2. Successful completion of the speaking activities on ACT-Comp.
3. Successful completion of the Listening Test.
4. Grade Point Average: 2.50 overall, in education and in the field(s) of study.
5. Positive recommendations from the department in which the student is seeking certification.
6. Positive recommendation from the Education Department.
7. All appropriate prerequisite courses must have been successfully completed.

The student may be granted full admission, provisional admission, or may be denied admission. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Application for Certification

Following completion of student teaching and near the completion of the program, each student should initiate application procedures for certification. The following criteria must be met for certification in West Virginia:

1. Grade Point Average: 2.25 overall, in education, and in the area(s) of certification.
2. Successful completion of the West Virginia Board of Education Subject Area competency examination.
3. Successful completion of the Comprehensive Examination in area of concentration and in Education (Secondary Certification candidates should see the Head of the Education Department).
4. Successful completion of student teaching and all required course work.
5. Recommendations from the Education Department and from the student's area of certification.
6. All requirements for the initial degree must be met.

Note: Graduation from Bethany College does not guarantee certification in the state of West Virginia. The student must meet all the criteria for certification as determined by the College and by the West Virginia Board of Education.

All required testing can be arranged through the Education Department at the appropriate times in the student's career at Bethany College.

The student may be recommended for full certification at the initial level, or may be eligible for a temporary permit. A student who fails to meet criteria may be denied recommendation. Appeal of the decision can be made through the Director of Teacher Preparation Programs to the Educational Personnel Preparation Advisory Committee. A full description of criteria and procedures can be found in the *Guide to Teacher Education*.

Competency-Based Professional

Block — Student teaching is conducted for the entire first semester of the senior year in area schools or off-campus centers. Related course work is integrated with student teaching to provide direct application to field experience. Students assigned to off-campus centers may need to live in the community where the center is located. The College will assist in locating housing if desired, and with other details of the arrangement.

Students are not permitted to schedule courses in conflict with the block during the semester they are enrolled in it, or carry extra-curricular activities which interfere with the requirements imposed by the block. Arrangements can usually be made for practice and participation in varsity sports. Any exceptions to the above must be approved by the head of the department concerned and by the Dean of the Faculty. Students should *not* register for other than the prescribed Professional Block courses without written permission from the Education Department.

Education 100 Developmental Studies:

Reading 2 hours

Designed to provide basic instruction in readings and comprehensive skills for first semester freshmen. Emphasis will be placed upon the students growth in the specific areas of word recognition, vocabulary, comprehension and study skills. (*Offered only as credit/non credit*)

Education 105 Developmental Studies:

Mathematics 2 hours

Designed to provide developmental mathematics instruction for the college student who wishes to improve his/her abilities in mathematics. Emphasis will be placed upon conceptual understanding of basic mathematics with corresponding computational skill development. (*Offered only as credit/noncredit. Does not fulfill Quantitative Reasoning perspective requirement*)

Ed. 201 Human Development I 4 hours
Individual and group development from infancy to adolescence. Observation and first-hand contacts with children are included. Educational programs are considered in terms of the total child development. *Freshmen not admitted.* (May be taken for credit as Social Work 201.)

Ed. 202 Human Development II 4 hours
Individual and group development from adolescence through senescence. Applications are made in relation to learning theory, self-understanding, and preparation for working with young people. *Freshmen not admitted.* (May be taken for credit as Social Work 202.)

Ed. 242 Principles and Curriculum of the Public School 2 hours
Introductory course in which students explore the goals of education and their implementation; the role of the teacher and professional concerns while applying the concepts of human development.

Ed. 275 Student Development in Higher Education 2 hours
Study of the philosophy of higher education and the development of the individual student within the college environment. Emphasis is placed upon personal growth, communication skills, group dynamics, and residence hall programming. Didactic and experiential learning in the areas of personal, academic, and vocational counseling is included. *Enrollment limited to Resident Advisors.* (May be taken for credit as Psychology 275.)

Ed. 289 Children's Literature 2 hours
Includes background of the history of literature for children; familiarity with established and current literature in this area; critical analysis skills; methods and techniques of using literature; work with children. (May be taken for credit as English 289.)

Ed. 290 Literature and Adolescence 2 hours
(See English 290.)

Ed. 300-309 Issues in Education
Courses focusing on special topics in Education for majors and non-majors.

Ed. 300 Juveniles, Law and School 4 hours
A review of the social and legal status of juveniles to 1899, through the Warren Court and today. Law libraries, Supreme Court decisions, juvenile authorities, detention centers, school and college authorities will provide applications for the basic concept of justice as it applies to juveniles in this country.

Ed. 301 Educational Ethnography: Field Based Research in the Schools 4 hours
This course will investigate the process of constructing, through direct observation, a theory of the working of a particular culture (i.e., schools). Students will study the theoretical base, rationale and methodology used in collecting and analyzing data by means of an ethnographic approach.

Ed. 302 School and Society 4 hours
A study of the role of schools in a society, of the school as a formal and informal organization, and of the function of schooling. The course will utilize the methodologies of the disciplines of education, sociology, and other social sciences. Case studies and on-site observations combine with a variety of readings to provide a wide range of viewpoints for students to evaluate. (May be taken for credit as Sociology 302.)

Ed. 311 Instructional Theory and Applications 2 hours
Studying and practicing the use of a wide variety of teaching strategies appropriate for adult learners; preparation for implementation in a variety of settings and with a variety of subjects.

Ed. 312 Curriculum Development 2 hours
Study of the methods of curriculum development and implementation. Practice with the appropriate subject matter. Practice in evaluating curricular materials in a variety of media. Study of curriculum evaluation.

Ed. 328 Human Sexuality 2 hours
(See Psychology 328.)

Ed. 340 Teaching Reading in the Content Areas 2 hours
This course will focus on diagnostic and prescriptive teaching techniques. Both the corrective techniques for the remedial reader and the higher order cognitive skills will be included. In addition to classwork this course includes two hours weekly of tutoring of middle school, secondary, or college students who have been recommended by their advisors for help in reading. *Prerequisite: Ed. 348.*

Ed. 344 Teaching Skills Laboratory Non-credit
Study and practice of specific teaching skills related to the technical and media areas of education. Students must complete the required work prior to student teaching. Information related to the course work is available from the Education Department office. Elementary and secondary.

Ed. 345 Methods and Content in Elementary and Middle Childhood I: Mathematics 4 hours
Practical application of arithmetical skills, including the understanding of fundamental processes; comparison of different philosophies in teaching arithmetic; the elements of modern math; and the theoretical and practical application of the metric system at all levels of the curriculum. Classroom experience in public schools. *Prerequisites: Math 250 or permission of the instructor, Ed. 242.*

Ed. 346 Methods and Content in Elementary and Middle Childhood II:

Language Arts 4 hours

Emphasis on teaching the skills of reading, listening, speaking, and writing as they relate to the total curriculum. Emphasis on teaching of reading and the integration of the related areas in language arts. Students are expected to demonstrate competence in appropriate audio-visual aids. Classroom experience in public schools. *Prerequisite: Ed. 242.*

Ed. 348 Professional Practicum 4 hours
Preparation of the prospective teacher for a professional role as observer and participant in the classroom. *Prerequisite: Ed. 242.*

Ed. 350 Reading: Diagnosis and Prescription 2 hours
This is a methods course which deals with reading disabilities within the content areas. Format will include diagnosis of specific problems and their origins as well as prescription for correction and remediation. Those enrolled in the course will participate in laboratory situations to tutor disabled readers. *(To be taken following or concurrent with Ed. 340 or Ed. 346.)*

Ed. 355 Mathematics: Diagnosis and Prescription 2 hours
This is a methods course which deals with corrective and remedial situations in mathematics. Format will include diagnosis of specific problems and their origins as well as prescription for correction and remediation. Those enrolled in the course will participate in laboratory situations to tutor students with problems in mathematics. *(To be taken following or concurrent with Ed. 345.)*

Ed. 401 History and Philosophy of Education 2 hours

Development of modern education in social, historical, and philosophical perspective, emphasizing backgrounds of present practices, current problems, and issues. Current practice is analyzed in terms of philosophic rationale and applications are made to the school situation.

Ed. 428 Principles and Techniques of Secondary Education 4 hours
Aims, functions, and curriculum organization of middle, junior high, and senior high schools. Basic strategies, materials, and techniques, including evaluation applicable to teaching, are integrated with a full semester of student teaching in schools. Certification and employment procedures, professional practices, and continuing education are also considered. *Prerequisite: Ed. 348.*

Ed. 447 Methods and Content in Elementary and Middle Childhood III: Science 2 hours
Understanding of the concepts of the sciences approached through various methods, including unit study, inquiry, experimentation, and the process approach. Practical application in school situation. *Prerequisite: Ed. 348.*

Ed. 448 Methods and Content in Elementary and Middle Childhood IV: Social Studies 2 hours
Understanding of the concepts of social studies approached through various methods, including unit study, inquiry, experimentation, and the process approach. Practical application in school situation. *Prerequisite: Ed. 348.*

Ed. 470 Observation and Directed Teaching 4 or 8 hours
Directed full-semester or half-semester observation and student teaching in schools with partial assignments in appropriate grade levels; to include weekly student teaching seminars and a minimum of 150 clock hours actual teaching. Students must make applications for student teaching prior to advance registration. Other course or activities which might interfere with student teaching are not permitted. *Concurrent with enrollment in the Education Year. (CR/NCR course.)*

Education 475 Professional Internship 4 hours

Participation in an adult training and/or educational program appropriate to the student's area of study and potential employment. Students will apply the skills and knowledge gained in previous courses.

Education 476 Education in Non-School Settings 2 hours

A seminar in education for the potential teacher of adults. Focus on the process of training in settings other than in traditional school settings. *To be taken concurrently with Education 475 Professional Internship.*

Ed. 480 Methods and Materials in Teaching 2 or 4 hours

See courses numbered 480 offered by Biology, Chemistry, English, Fine and Applied Arts, Foreign Languages, General Sciences, Mathematics, Physical Education, Physics, Psychology and Social Sciences.

Ed. 482 Methods and Materials in Bilingual-Bicultural Education 2 hours
(See Foreign Language 482.)

Ed. 484 Methods of Teaching English as a Foreign Language 2 hours
(See English 484.)

Ed. 487-488 Independent Study 2 or 4 hours

Ed. 490 Senior Project 2-8 hours

Special Education

Sp. Ed. 205 Introduction to the Exceptional Learner 2 hours

This course is designed to serve as an integral part of the preparation of teachers of Specific Learning Disability students and others who are involved with exceptional students educationally. Recent social, legal, and educational trends related to the handicapped student will be discussed, as well as the characteristics and educational methods for various areas of exceptionalities.

Sp. Ed. 206 Educating the Specific Learning Disabilities Student 4 hours

This course is designed to introduce the characteristics of the Specific Learning Disability (SLD) student and models of intervention, mainstreaming, and roles of resource room, consulting room, and teachers of self-contained classrooms. A field placement is required for this course. *Prerequisite: Sp. Ed. 205.*

Sp. Ed. 320 Teaching Methods for Specific Learning Disabilities: Early and Middle Childhood 2 hours

This course is designed to instruct specific learning disability (SLD) teachers in methods and models of intervention and synthesis of the diagnostic-prescriptive model. This is a SLD methods course for early and middle childhood that stresses intervention strategies for different levels of severity. *Prerequisite: Sp. Ed. 206.*

Sp. Ed. 410 Tests and Measurements 2 hours

This course is designed to provide teachers with knowledge of and experience with a variety of assessment instruments for the purpose of educational evaluation placement, diagnosis, and intervention. Students will administer formal tests and develop informal tests as a means of acquiring skills with standardized, norm-referenced, criteria-referenced, diagnostic, and achievement tests to provide appropriate educational programs for the learning disabled student.

Prerequisite: Ed. 348. (May be taken for credit as Psychology 410.)

Sp. Ed. 470 Observation and Directed Teaching: Specific Learning Disabilities 4 hours

Directed half-semester observation and student teaching in schools with partial assignments in appropriate specific learning disabilities placements, to include weekly student teaching seminars and a minimum of 150 clock hours actual teaching. Students must make application for student teaching prior to advance registration. Other course or activities which might interfere with student teaching are not permitted. Concurrent with enrollment in the Education Year and Education 470 (4 hours credit). Credit-No Credit.



English

Aims

To help students to develop and maintain the ability to write clear and effective English; to guide them toward an increased understanding and critical appreciation of their literary heritage; to help prepare them for graduate and professional study. In addition, the department provides programs that prepare students for certification as teachers of English and Language Arts.

Requirements for Field of Concentration

1. Concentration in English requires a minimum of 32 hours in the department, exclusive of the Senior Project. The following courses are required: 140 or 150, 325-326, 330, 341-342, 477. Related requirements are Interdisciplinary Studies 251, 252. Students should also

elect at least one Seminar in British Literature (courses numbered 420-429), and at least one Seminar in American Literature (courses numbered 450-459). These seminars, together with other advanced courses or independent study, will extend the student's knowledge of one or two areas of literature, provide background for the Senior Project, and help to prepare for future study or a career. Thus, the program of a student preparing for the law or another profession will be different from that of a student preparing for graduate study in English or for secondary school teaching.

2. At least 12 hours in another department should be included in the field of concentration. These courses may be related to the student's special interests or vocational plans.

3. Students planning to attend graduate or professional schools should prepare to meet foreign language reading requirements.

4. Students are not accepted for concentration in English later than the beginning of their fifth semester unless they have completed English 140 (or 150) and either English 325-326 or English 341-342.

5. Students concentrating in English are expected to attain a minimum grade of C in all courses in the department.

6. Only students who have completed the following courses or their equivalents will be recommended for certification to teach English in secondary school: Eng. 140, 215, 325-326, 341-342, 370, 375; Comm. 335; FAA 220; Eng. 290 or Ed. 290, Eng. 480 or Ed. 480; two courses from Eng. 100, 125, 150, 213, 215, 490, or FAA 215; two courses from Eng. 261, 262, 263, 264, 330, 350, 420-429, 440-449, 450-459, 477, or 270; and Eng. 266 or 268. A second teaching field also is required. Students interested in teaching should consult the Education Department listings for required courses in Professional Education.

Writing Proficiency Program

The Writing Proficiency Program is administered by the English Department. Students should complete the program and meet the writing proficiency requirement for graduation before the beginning of the senior year.

Students must achieve and maintain an above-average level of proficiency in expository writing by taking the annual Writing Qualification Test or by satisfactory completion of selected writing courses offered by the English Department.

Students who choose to satisfy the requirement by enrolling in writing courses may do so by electing from the following: English 100, 120, 125, 140, 150, 205, 209, 213, 215, or 351. No more than one course per academic year will apply to the requirement. See below for the number of courses needed to satisfy the writing proficiency requirement.

The Department of English will certify to the Registrar that a student has satisfied the writing proficiency requirement for graduation when proficiency has been demonstrated in one of the following ways:

1. By achieving a high level of proficiency on both the first Writing Qualification Test, taken in November of the freshman year, and the second Writing Qualification Test, taken in March or April of the sophomore year; or by achieving a grade of C+ or better in a writing course taken instead of either or both of these tests. *A student whose proficiency is certified in this way is not required to take additional tests or courses.*
2. By taking the first Writing Qualification Test in November of the freshman year and achieving a high level of proficiency on the third test, taken in April of the junior year.
3. By achieving a grade of C+ or better in a writing course taken in the junior year.
4. By achieving a grade of B or better in any writing equivalency course taken either the freshman or sophomore year.

*Students who have not met the writing proficiency requirement before the beginning of their seventh semester must enroll in English 120, a non-credit, non-graded course in expository writing. Special Writing Qualification Tests are given as part of this course, and students must continue in the course until they have achieved a high level of proficiency on one of the special tests. Special Writing Qualification Tests are given to seniors *only* when enrolled in the course.*

Special arrangements are made for students who transfer from other colleges. Transfer students should consult the Department of English immediately upon enrolling at Bethany.

Writing tests are given according to the following schedule:

November

Writing Qualification Test: Freshmen (Required)

February

Diagnostic Qualification Test: All students entering in February

April

Writing Qualification Test: Sophomores (Advisory) and Juniors (Required)

Eng. 100 College Composition 4 hours

A basic course for training and practice in the process of writing effective essays from the prewriting stage through final revision and polishing. Emphasis is on audience and purpose, point of view, organization and style. Formal assignments encourage students to write the types of essays they are likely to encounter in other college courses, including documented reports.

Eng. 120 Expository Writing Non-credit
Training and practice in writing clear and effective expository prose. After an initial diagnosis, an individual program is designed for each student. *Offered as a substitute for English 100 and an alternative to English 120. (May not be taken on a credit-no credit basis.)*

Eng. 125 Expository Writing Workshop 2 hours
Training and practice in writing clear and effective expository prose. After an initial diagnosis, an individual program is designed for each student. *Offered as a substitute for English 100 and an alternative to English 120. (May not be taken on a credit-no credit basis.)*

Eng. 140 Introduction to Literature 4 hours
Introduction to the study of poetry, drama, and fiction. Emphasis is on the development of techniques for the analysis and evaluation of poetry, drama, and fiction and on the writing of literary essays. *Open to all students. Required for concentration in English.*

Eng. 150 Honors Freshman English 4 hours
A course for freshmen of superior ability and accomplishment. Introduction to the principles of critical reading and writing and to the analysis and evaluation of poetry, drama, and fiction. Intensive practice in expository and imaginative writing with emphasis upon the achievement of clarity and accuracy. *May be substituted for Eng. 140 to fulfill requirement for concentration in English and prerequisites for English courses. Enrollment by invitation only.*

Eng. 160 Introduction to Film 4 hours
In this course, students will study the film as a technical artifact, an art object, a mirror of society, and a moral statement. They will see twelve classic films such as Chaplin's *City Lights*, Resnais's *Hiroshima Mon Amour*, Bergman's *Virgin Spring*, and Hitchcock's *Psycho*. *Fee: \$15.*

Eng. 170 Introduction to Poetry 4 hours
Development of the student's ability to read, understand, and evaluate poetry. Study of poetic forms and techniques, with some consideration of the historical development of poetry in English.

Eng. 205 Writing for Business and Industry 2 hours
Writing formal and informal reports, summaries, business letters, job descriptions, applications and resumes. Each student will complete approximately 10 writing assignments. *Prerequisite: English 100 or demonstrated competence in expository writing.*

Eng. 209 Technical Writing 4 hours
A workshop for training and practice in the written communication of specialized information to audiences with varying levels of knowledge. Emphasis is on the analysis of audiences and purposes, the selection and organization of information, the creation of informative graphics, and the manipulation of conventional formats to develop concise and effective instruction sets, descriptive analyses, abstracts, occurrence reports, literature reviews, feasibility studies, proposals, investigative reports and other types of writing usually required of professionals. Students will make use of the College's computer facilities for word processing and for generating graphs, charts and lists.

Eng. 213 Advanced Expository Writing 2 hours
Intensive practice in writing expository prose with emphasis upon the achievement of literary excellence. *Prerequisite: English 100 or the equivalent. Enrollment limited to 15 students with preference given to juniors and seniors.*



Eng. 215 Creative Writing 2 hours
Training and practice in the creative aspects of expository and imaginative writing. Students write essays, sketches, short fiction, poems, and dramatic scenes. *Required for students preparing to teach secondary school English. Prerequisite: English 100 or its equivalent. Enrollment limited to 15 students with preference given to juniors and seniors. May be repeated once for additional credit.*

Eng. 261-262 British Novel 2 hours each
Development of the British novel from the 18th century to the present. 261: Defoe through Dickens. 262: Hardy to the present.

Eng. 263-264 American Novel
2 hours each

Development of the American novel from the 19th century to the present. 263: Beginnings through World War I. 264: 1920s to the present.

Eng. 266 Masterpieces of Western Literature 4 hours

A study of major works from the Middle Ages through the nineteenth century. Such works as the following will be considered: Dante's *Divine Comedy*, Rabelais' *Gargantua and Pantagruel*, Cervantes' *Don Quixote*, Swift's *Gulliver's Travels*, Goethe's *Faust*, and Tolstoy's *Anna Karenina*.

Eng. 267 Mythology 2 hours

Study of Greek and Roman myths and their later use in Western art, literature, music, and science. Brief comparative study of Celtic and Germanic myths.

Eng. 268 Modern World Literature
4 hours

A study of the work of writers representing the diverse cultural traditions of the modern world. In addition to the works representing the western tradition, works will be studied representing such traditions as the Eastern European, the middle Eastern, the African, the Latin American and the Oriental.

Eng. 270 Shakespeare 4 hours
Rapid reading of the major plays with emphasis upon Shakespeare's themes, motifs, language and characterization. (May be taken for credit as Fine and Applied Arts 270.)

Eng. 280-289 Colloquium in Literature
2 or 4 hours each

Courses for the discussion of special topics in literature. *Enrollment in each course limited to 20 students.*

Eng. 289 Children's Literature 2 hours
(See Education 289.)

Eng. 290 Literature and Adolescence
2 hours

Study of important works about or of special interest to young people of junior high school through high school age. Techniques of presenting the works are considered. Readings are primarily in short stories and novels. *Required for students preparing to teach secondary school English.* (May be taken for credit as Education 290.)

Eng. 325-326 British Literature
4 hours each

Development of British literature from the beginning through the Victorian Period. First semester: from *Beowulf* through Milton. Second semester: from the Restoration to the end of the 19th century. *Prerequisite: Eng. 140 or permission of the instructor. Required for concentration in English.*

Eng. 330 Twentieth-Century British Literature 4 hours

Study of important works of British fiction and drama during this century. Writers to be included: Eliot, Yeats, Woolf, Joyce, Beckett, and Pinter. *Prerequisite: Eng. 140. Required for concentration in English.*

Eng. 341-342 American Literature
4 hours each

Development of American literature from the Colonial Period to the present with emphasis upon the writers of the 19th and 20th centuries. *Prerequisite: Eng. 140 or permission of the instructor.*

Eng. 351 Literary Criticism 4 hours
Study of the history of literary criticism, literary theory, and applied approaches to literary criticism. Special emphasis will be placed on the preparation of essays which apply various theories and demonstrate various critical points of view.

Eng. 370 Development of Modern English 4 hours

History of the English language from Anglo-Saxon to modern English with emphasis upon the structure and vocabulary of the latter. *Required for students preparing to teach secondary school English. Not open to Freshmen.*

Eng. 375 English Grammar 2 hours

The description and analysis of the grammar of the English language. Various grammatical systems are considered, such as the traditional, the structural, and the transformational-generative. *Required for students preparing to teach secondary school English.*

Eng. 420-429 Seminar in Major Authors
2 or 4 hours each

Advanced study of one or more major British, American, or European authors. *Prerequisite: previous study of the author or authors in a survey course. Enrollment in each course limited to 12 students. Topics change regularly. Recent offerings included:*

Eng. 421 Hemingway 2 hours

Study of selected fiction by Ernest Hemingway. Emphasis will be on the Nick Adams stories, "A Farewell to Arms" and "The Old Man and the Sea."

Eng. 423 Johnson and Boswell 4 hours
Study of the life and selected works of Samuel Johnson and of James Boswell as journalist and biographer.

Eng. 440-449 Seminar in British Literature 2 or 4 hours each
Advanced study of a period, movement, or tradition in British literature. *Prerequisite: previous study of the period, movement, or tradition in a survey course. Enrollment in each course limited to 12 students. Topics change regularly. The last offering was:*

Eng. 444 Age of Johnson 4 hours
Study of the major prose, poetry, and drama of the mid-eighteenth century with emphasis upon the work of Samuel Johnson and the members of his circle, including Boswell, Goldsmith, and others.

Eng. 450-459 Seminar in American Literature 2 or 4 hours each
Advanced study of a period, movement, or tradition in American literature. *Prerequisite: previous study of the period, movement, or tradition in a survey course. Enrollment in each course limited to 12 students. Topics change regularly. Recent offerings included:*

Eng. 450 Recent American Literature 4 hours
A study of American poetry, drama and fiction since World War II. Emphasis is on the analysis of works representing the various ideas, techniques, styles and movements characterizing the writing of the last forty years.

Eng. 456 The 1920's 4 hours
A study of the poetry, drama, fiction, and critical writings of the 1920's. Emphasis is on such major writers as Pound, Eliot, Fitzgerald, Hemingway, Faulkner, and O'Neill, but other important writers will also be studied.

Eng. 457 Hawthorne, James, and Faulkner 4 hours
A study of critical and fictional works of Hawthorne, James, and Faulkner. Emphasis is on ideas, themes, and techniques.

Eng. 477 English Seminar 2 hours
Reading and research designed to help students review and organize their knowledge of literature. *Prerequisites. English 140 or 150, 325-326, 330, 341-342 or permission of the instructor.*

Eng. 480 Methods of Teaching English 2 hours
Teaching of high school composition and literature. Literary analysis, systems of grammar, and reading improvement. (May be taken for credit as Education 480.)

Eng. 483 Theory and Practice of Teaching Composition 2 hours
An examination of historical and current theories of composition as a conceptual background for both teaching and writing. Students will study research and theory on the writing process. Students will practice both writing and teaching writing.

Eng. 484 Methods of Teaching English as a Foreign Language 2 hours
Directed study of techniques for teaching English vocabulary, spelling, and grammar to native speakers of other languages. Practical experience through tutoring. (May be taken for credit as Education 484.) *Offered upon request.*

Eng. 487-488 Independent Study 2 or 4 hours each
Individual study in any area of English for which the student is qualified. Independent study is offered only in areas not included in other courses in the department. *Prerequisites: Adequate preparation to undertake the study as determined by the instructor; permission of the head of the department.*

Eng. 490 Senior Project 2-8 hours
Generally consists of a major critical paper on a topic developed from at least one of the student's elective courses in the department. During the junior year, the student should determine an area of interest and make a preliminary investigation of it after consulting with his or her mentor (the faculty member best qualified to assist in the project). Reading and research should continue during the student's senior year, and much of the final semester should be devoted to preparation of the paper. Sometimes, the project may take other forms. *Students wishing to undertake an unusual project must consult with the head of the department no later than the beginning of the fourth semester. Credit for the senior project is not included in the total number of hours required for concentration in English.*



Fine and Applied Arts

Aims

The Fine and Applied Arts Department provides study in the visual arts, music, theatre, and communication design. The purpose of the department is to give expression to the aesthetic unity of the various forms and modes of the arts and, at the same time, to permit students to pursue practice in the arts for both personal satisfaction and professional preparation. Emphases include 1) the cultural foundations and traditions of the arts, including studio and performance areas, 2) graphics and communication design, and 3) the

professional aspects of arts management, including internship opportunities.

Requirements for Field of Concentration

Students concentrating in Fine and Applied Arts will take Fine and Applied Arts 101-102 and 110-111. Related requirements are Interdisciplinary Studies 251, 252. In addition, the concentration requires completion of one of the following departmental emphases: 1) Two-Dimensional Art: 16 hours; 2) Three-Dimensional Art: 20 hours; 3) Communication Design: 26 hours; or 4) Theatre: 22 hours. Also each student must complete FAA 477 and a Senior Project. Students interested in the field of Arts Management should complete one of the emphases above, the Professional Core Program in Management, and the course in Fine and Applied Arts 399.

Foundation Courses

FAA 101 Introduction to Art 4 hours
Historical and aesthetic study of the visual arts from the ancient world to the present. Representative master works of art are studied, and consideration is given to aesthetic functions and values.

FAA 102 Introduction to Music 4 hours
Historical and aesthetic study of music from Gregorian Chant to the present. Representative master works of music are studied, and consideration is given to aesthetic functions and values.

FAA 110-111 Dramatic Literature and Theatre Development 4 hours each
A survey of drama and theatre architecture and design with emphasis on both primary and secondary literature in both historical and aesthetic context.

FAA 120 Music as Art and Science 2 hours
This course provides an aural study of classical and popular music within an aesthetic perspective. It surveys various musicians within various genres and does not presuppose any previous musical background.

FAA 203 Interpersonal Communication: Public Speaking 4 hours
(See Communications 206.)

FAA 340 Art Activities in the Elementary Schools 4 hours
Study of the theories and goals of art education in the elementary school with emphasis on the child's growth and development through art. Exploration of art techniques is included.

FAA 399 Fine Arts Management 2 hours
The study of management principles and practices as applied to agencies and institutions in the various fields of the arts, such as museums, galleries, symphonies, theatres, and others.

FA 477 Senior Seminar 2 hours
Review of the fine arts area concentrating upon the student's field of emphasis. *Required of all seniors in the fine arts field.*

FAA 481 Methods and Materials in Teaching Elementary School Music 2 hours
The aims and values of elementary school music will be studied, opportunities to develop teaching techniques will be provided, and introductions to standard materials will be made. *Required of all elementary education majors.*

FAA 487-488 Independent Study 2-4 hours

FAA 490 Senior Project 2-4 hours
Recommended to begin during the second semester of the junior year.

Two-Dimensional Art

FAA 200 Introduction to Two-Dimensional Design 4 hours
Basic course work in the theories and practice of two-dimensional design; study of the elements and materials in relation to design potentials with practical applications. *Prerequisite for those emphasizing art.*

FAA 205 Still-Life and Landscape 2 hours
Concentrated activity in drawing using a variety of drawing media. Primary emphasis is placed on still life and landscape.

FAA 206 Figure and Portraiture Drawing 2 hours
Concentrated activity in drawing using a variety of drawing media. Primary emphasis is placed on figure drawing and portraiture.

FAA 300 Watercolor Painting 2 hours
Creative exploration of the techniques of watercolor and acrylics, using still life, landscape, portraiture, and imaginative subject matter in a variety of styles.

FAA 301 Oil Painting 2 hours
Creative exploration of the techniques of oil paints and compatible media, using still life, landscape, portraiture, and imaginative subject matter in a variety of styles.

FAA 305 Advanced Still-Life and Landscape Drawing 2 hours
Advanced problems in drawing with a concentration in a specific area, including still life, landscape, and imaginary drawing. Emphasis on composition. *Prerequisite: FAA 205.*

FAA 306 Advanced Figure and Portraiture Drawing 2 hours
Advanced problems in drawing with a concentration in a specific area, including figure drawing and portraiture. *Prerequisite: FAA 206.*

Three-Dimensional Art

FAA 200 Introduction to Two-Dimensional Design 4 hours
(See Two-Dimensional Art Emphasis.)

FAA 201 Introduction to Three-Dimensional Design 4 hours
Basic course work in the theories and practice of three-dimensional design; study of the elements and materials in relation to design potentials with practical applications. *Prerequisite for those emphasizing three-dimensional art.*

FAA 210 Ceramics I 2 hours
Studio experience in forming, firing, and glazing pottery, including ceramic sculpture.

FAA 310 Ceramics II 2 hours
Advanced problems in media and subject matter selected by the student with the advice of the instructor. *Prerequisite: FAA 210.*

FAA 320 Sculpture I 2 hours
Creative expression in three-dimensional forms. Students work with materials that are readily available and easily handled such as wood, wire, plaster, and clay. *Prerequisite: FAA 201 or permission of the instructor.*

FAA 420 Sculpture II 2 hours
Advanced problems in media and subject matter selected by the student with the advice of the instructor. *Prerequisite: FAA 320.*

FAA 425 Printmaking 4 hours
The study of printmaking processes emphasizing creative expression through such techniques as relief, intaglio, planography, and serigraphy. *Prerequisite: FAA 205 or permission of the instructor.*

Communication Design

FAA 200 Introduction to Two-Dimensional Design 4 hours
(See Two-Dimensional Art Emphasis.)

FAA 302 Airbrush Techniques 2 hours
Beginning through advanced airbrush techniques. Exploration of various hues — graphic design, photo retouching, ceramics, and painting.

FAA 303 Lettering and Layout 4 hours
Introduction to calligraphy, typography, letter forms, and layout, with emphasis on design, legibility, and creative practice.

FAA 304 Design Applications 4 hours
Emphasis on problem solving experiences as related to visual communications. The mechanics and psychology of two-dimensional and three-dimensional design are explored as a foundation for graphic design.

FAA 404 Television Graphics 4 hours
Emphasis on the design of visual symbols for television. Combines principles of graphic art with the particular requirements of television production.

FAA 405 Communication Design Practice 4 hours
The study of professional procedures, structures, communication functions, and processes as applied to areas of graphic design. *Prerequisite: FAA 304.*

FAA 406 Computer Graphics and Applied Design 4 hours
Practical applications of graphics and communication design techniques as related to the computer and other technological aids. *Prerequisite: FAA 405.*

Music

FAA 125-126 College Choir 1 hour each
Preparation for performance of choral music. *Membership limited. Enrollment by audition.*

FAA 131-132 Brass Ensemble 1 hour each
Study and preparation for performance of music for wind instruments from the 17th through 20th centuries. Enrollment by audition.

FAA 135-136 Chamber Ensemble

1 hour each

Study and preparation for performance of the standard chamber literature; quartets, trios, and other works according to the instrumentalists available. *Enrollment by audition.*

FAA 137-138 Jazz Band 1 hour each

Study and preparation for performance of arrangements for large jazz band. Designed to develop an appreciation for the musical styles of Glenn Miller, Woody Herman, Stan Kenton, and others. *Enrollment by audition.*

FAA 161-162 Harpsichord 1 hour each

Private instruction in the techniques, literature and history of the harpsichord. *Enrollment by permission of the instructor.*

FAA 163-164 Pipe Organ 1 hour each

Private instruction in the techniques, theory and literature of the pipe organ. *Prerequisites: proficiency on the piano equivalent to the Bach Inventions, early sonatas of Beethoven, Haydn, or Mozart. Enrollment by permission of the instructor.*

FAA 165-166 Piano 1 hour each

Private instruction of the techniques, theory, and literature of the piano. *Enrollment by permission of the instructor.*

FAA 167-168 Strings 1 hour each

Private instruction in the techniques, theory, and literature of violin, viola, cello, or bass. *Enrollment by permission of the instructor.*

FAA 169-170 Classical Guitar 1 hour each

Private instruction in the techniques, theory, and literature of the classical guitar. *Enrollment by permission of the instructor.*

FAA 171-172 Winds 1 hour each

Private instruction in the techniques, theory, and literature of the brass and woodwind instruments. *Enrollment by permission of the instructor.*

FAA 173-174 Voice 1 hour each

Private instruction in the technique, theory, and literature of voice. Open to all students who have adequate native ability. *Enrollment by permission of the instructor.*

Theatre

FAA 151 Fundamentals of Stage Construction 2 hours**FAA 152 Theatre Lighting** 2 hours**FAA 153 Theatre Make-Up** 2 hours**FAA 154 Costuming** 2 hours

Not required for Theatre Emphasis in FAA.

FAA 155 Scene Painting 2 hours

Techniques in painting stage scenery used in stage design: spattering, dry and wet scumbling, dry brushing, stippling, feather dusting, and rag rolling. *Not required for Theatre Emphasis in FAA.*

FAA 215 Dance for Non-Dancers 2 hours

The development of beginning dance skills with emphasis upon improvisational dance modes and creative body language. *Not required for Theatre Emphasis in FAA.*

FAA 220 Beginning Acting 2 hours

Movement, various styles, improvisations, projections of character, and speech technique. The course includes a 10-20 minute planned and rehearsed program that demonstrates skills acquired in improvisation and body and voice techniques.

FAA 222 Advanced Acting 2 hours

Scene study as a unit of theatrical form. Scenes from various periods to be directed and performed. Focus on interaction between characters.

FAA 230 Children's Theatre 2 hours

The development of techniques required in writing and performing before children. Focus is on the preparation of children's theatre projects to be presented before groups of young people or to be televised.

FAA 232 Musical Comedy 2 hours

Study of musical comedy scores and libretti, basic principles of musical comedy singing, dancing, and acting, and other fundamentals of the genre.

FAA 270 Shakespeare 4 hours

(See English 270.)

FAA 330 Directing 2 hours

Fundamentals of staging, blocking, movement, stage business, tempo, script analyses, casting, and rehearsal planning. The course includes preparation of a prompt book for a one-act play to be directed for public performance. *Prerequisite: FAA 220.*

FAA 416 Opera 2 hours

This course is designed to introduce the general student to operatic techniques and conventions. The principle emphasis will be on the ways in which music enhances dramatic elements in operas of Mozart and Verdi. No technical knowledge of music is required. *Not required for Theatre Emphasis in FAA.*

Foreign Language

Aims

To familiarize students with the language and literature of the French, German, and Spanish speaking peoples; to help students understand a culture other than their own; and to assist students in preparing for careers requiring foreign language skills. The program also provides students interested in research with a reading knowledge of a foreign language, and it helps travelers to foreign countries acquire basic conversation skills.

Requirements for Field of Concentration in French, German, or Spanish

A minimum of 24 hours in the target language (not including French 110-120, German 110-120, or Spanish 110-120) plus Foreign Language 425, and a Senior Project. Related requirements are Interdisciplinary Studies 251, 252.

A working knowledge of a foreign language other than the one chosen as the field of concentration is recommended. Every student is required to spend a minimum of one semester studying in a country where his or her major foreign language is spoken. Students expecting to teach a foreign language must complete Foreign Language 480 and 481 and the appropriate civilization and survey of literature courses.

Foreign Language majors should consider a strong second field in an area related to career goals.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach French, German or Spanish in secondary school. French - major: Fr. 110, 120, 230, either 240 or 241, 313, either 351 or 352. F.L. 480 and any other four hours of French. German - major: Ger. 110, 120, 230, either 240 or 241, 312, 351 or 352. F.L. 425, 480 and any other four hours of German. Spanish - major: Sp. 110, 120, 230, either 240 or 241, 310 or 311, 351 or 352. F.L. 425, 480 and any other six hours of Spanish. Second field: Sp. 110, 120, 230, either 240 or 241, 351 or 352. F.L. 480 and any other four hours in Spanish. See the Education Department listings for required Professional Education courses. A second teaching field is required.

French

Fr. 110 French I 4 hours

This is the first of three courses emphasizing the acquisition of French language skills needed to satisfy basic social requirements in French-speaking countries. Elementary listening, speaking, reading and writing needs are addressed, as well as an introduction to French cultures and issues. *Oral practice sessions are required. French I is intended primarily for students who have no acquaintance with the language.*

Fr. 120 French II 4 hours

The second of three courses: See French 110. *Prerequisite: Fr. 110 or equivalent.*

Fr. 230 French III 4 hours

The third of three courses: See French 110. *Prerequisite: Fr. 120 or equivalent.*

Fr. 240 Conversation and Composition: The Living Language 4 hours

French and American life styles are compared through discussions, skits, and compositions designed to improve the student's communication skills in French. *Prerequisite: Fr. 230 or equivalent.*

Fr. 241 Conversation and Composition: Francophone World 4 hours

While improving skills of spoken and written communications in French, the student becomes acquainted with contemporary issues in the French-speaking world. *Prerequisite: Fr. 230 or equivalent.*

Fr. 313 France 4 hours

Introduction to France, with special attention to its political and cultural history, contemporary institutions, activities, customs and values. Cross-cultural comparisons and contrasts of France and the United States are included.

Fr. 351 Survey of French Literature I 4 hours

Survey of French literature from the earliest periods to the end of the 18th century. Readings in French from an anthology and certain reference works. Conducted in French. *Prerequisite: Fr. 230 or equivalent.*

Fr. 352 Survey of French Literature II 4 hours

Survey of French literature of the 19th and 20th centuries. Introduction to *explication de texte* techniques. Readings in French from an anthology and certain reference works. Conducted in French. *Prerequisite: Fr. 230 or equivalent.*

Fr. 400 Advanced French Grammar 2 hours

To facilitate correctness in writing and speaking, the grammatical structure of the French language is examined. *Prerequisite: Fr. 230 or equivalent.*

Literary Studies

Seminars highlighting major literary movements and genres from France's past and present.

Fr. 411 19th Century Novel 2 hours
French romanticism, realism, and naturalism are examined through the works of such novelists as Hugo, Stendhal, Flaubert, Balzac, and Zola. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 412 Contemporary Novel 2 hours
Study of the development of 20th century French fiction, from Proust and Gide to the New Novel. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 413 Philosophers of the French Enlightenment 2 hours
Examination of representative works by major 18th century French thinkers, including Montesquieu, Voltaire, Diderot, and Rousseau. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 414 French Existentialism in Literature 2 hours
Study of France's existentialists, including Sartre, Camus, and de Beauvoir. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*



Fr. 415 17th Century Classical Theatre 2 hours
Study of the great classical dramatists of France: Corneille, Moliere, and Racine. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 416 Poetry: From Romanticism to Surrealism 2 hours
Analysis of 19th and early 20th century French poetry, including the works of Lamartine, Hugo, Gautier, Baudelaire, Rimbaud, Apollinaire, Breton, and others. Conducted in French. *Prerequisite: A good reading knowledge of French. Fr. 351 or 352 is recommended.*

Fr. 487-488 Independent Study
2 or 4 hours each

Fr. 490 Senior Project 2-8 hours

German

Ger. 110 German I 4 hours
This is the first of three courses emphasizing the acquisition of German language skills needed to satisfy basic social requirements in German-speaking countries. Elementary listening, speaking, reading, and writing needs are addressed, as well as an introduction to German culture and issues. *Oral practice sessions are required. German I is intended primarily for students who have no acquaintance with the language.*

Ger. 120 German II 4 hours
The second of three courses; See German 110. *Prerequisite: Ger. 110 or equivalent.*

Ger. 230 German III 4 hours
The third of three courses; See German 110. *Prerequisite: Ger. 120 or equivalent.*

Ger. 240 Conversation and Composition I 4 hours
Discussion of life in Germany. Designed to improve communication skills. Brief oral and written reports. *Prerequisite: Ger. 230 or equivalent.*

Ger. 241 Conversation and Composition II 4 hours
While improving skills of spoken and written communication in German, the student will discuss contemporary problems. *Prerequisite: Ger. 230 or equivalent.*

Ger. 302 German Business Correspondence 2 hours
Designed to prepare students for possible employment in German-American firms through the development of skills in business letter writing and familiarization with German technical terms in business and banking. *Prerequisite: Ger. 230 or equivalent.*

Ger. 306 Modern German Short Stories 2 hours
Selected stories by contemporary writers are read and discussed in German. *Prerequisite: Ger. 230 or equivalent.*

Ger. 308 Modern German Dramas 2 hours
Plays by modern authors, including Brecht and Dürrenmatt, are read and discussed in German. *Prerequisite: Ger. 230 or equivalent.*

Ger. 312 German Civilization 4 hours
Designed to acquaint the student with the history, culture, and people of the German speaking countries, the two Germanies, Switzerland and Austria.

Ger. 351 Survey of German Literature I 4 hours

Survey of German literature from the earliest periods to the beginning of the 19th century. Readings in German from an anthology. Conducted in German.

Prerequisite: Ger. 230 or equivalent.

Ger. 352 Survey of German Literature II 4 hours

Survey of German Literature from the Romantic period to the present. Readings in German from an anthology. Conducted in German. *Prerequisite: German 230 or equivalent.*

Ger. 413 German Literature in the 20th Century 4 hours

Introduction to some of the chief authors, works, and literary movements of the 20th century. Readings (in German) include representative works by Mann, Kafka, Hesse, Grass, and Böll. *Prerequisite: A good reading knowledge of German. Ger. 351, 352 are recommended.*

Ger. 487-488 Independent Study
2 or 4 hours each

Ger. 490 Senior Project 2-8

Spanish

Span. 110 Spanish I 4 hours

This is the first of three courses emphasizing the acquisition of Spanish language skills needed to satisfy basic social requirements in Spanish-speaking countries. Elementary listening, speaking, reading, and writing needs are addressed, as well as an introduction to Spanish cultures and issues. *Oral practice sessions are required. Spanish I is intended primarily for students who have no acquaintance with the language.*

Span. 120 Spanish II 4 hours

The second of three courses: See Spanish 110.

Prerequisite: Span. 110 or equivalent.

Span. 230 Spanish III 4 hours

The third of three courses: See Spanish 110.

Prerequisite: Span. 120 or equivalent.

Span. 240 Spanish Conversation and Composition: Spain 4 hours

Intensive training in spoken and written Spanish with emphasis on current events in Spain. Oral reports are based on readings from newspapers, magazines, and literary works.

Prerequisite: Span. 230 or equivalent.

Span. 241 Spanish Conversation and Composition: Latin American 4 hours

Intensive training in spoken and written Spanish with emphasis on current events in Latin America. Oral reports are based on readings from newspapers, magazines, and literary works. *Prerequisite: Span. 230 or equivalent.*

Span. 302 International Spanish Correspondence and Translation 4 hours

Designed to prepare students of Spanish for possible employment in international government and commercial professions through the development of skills in business and diplomatic letter writing, familiarization with technical Spanish terms, instruction in methods of modern translation, and comprehensive preparation for bilingual positions.

Span. 310 Spanish American Civilization 2 hours

Development of Latin America from the pre-Columbian era to the present day in art, music, drama, history, and literature. Each student does research on a specific project selected in consultation with the instructor. Conducted in English.

Span. 311 Spanish Civilization 2 or 4 hours

Spain's influence on the history, art, music, drama, literature, and science of the world. Each student does research on a specific project selected in consultation with the instructor. Conducted in English.



Span. 351 Survey of Spanish Literature I 4 hours

Survey of Spanish literature from the Middle Ages through the 17th century. Readings in Spanish from the Medieval, Renaissance and Baroque periods.

Conducted in Spanish. *Prerequisite: Span. 200 or equivalent.*

Span. 352 Survey of Spanish Literature II 4 hours

Representative authors and works from the Neoclassic, Romantic and Realist periods as well as the various 20th century literary movements. Conducted in Spanish.

Prerequisite: Span. 200 or equivalent.

Span. 353 Survey of Spanish American Literature 4 hours

Great authors and works of Spanish American literature from the beginning to the present. Conducted in Spanish.

Prerequisite: Span. 200 or equivalent.

Literary Studies

Span. 403 Literature of Spain: The Generation of '98 and the 20th Century 4 hours

Works of the novelists and philosophers who searched for the reasons for Spain's decline at the end of the 19th century, and of representative authors of the 20th century.

Prerequisite: Span. 200 or equivalent.

Span. 406 Contemporary Literature in Spanish America 4 hours

Survey of modern novels and their expression of important aspects of Latin American life. *Prerequisite: Span. 200 or equivalent.*

Span. 451 Literature of Spain:

19th Century Romantics 2 hours

Poetry, plays, and legends from the first half of the 19th century. *Prerequisite: Span. 200 or equivalent.*

Span. 452 Literature of Spain:

19th Century Realists 2 hours

The regional novel of customs. Psychological, social, and thesis novels of the last half of the 19th century. *Prerequisite: Span. 200 or equivalent.*

Span. 453 Literature of Spain: The

Golden Age 2 hours

Poetry and drama of the 16th and 17th centuries when Spain was at its artistic and literary height. *Prerequisite: Span. 200 or equivalent.*

Span. 454 Literature of Spain:

Don Quixote 2 hours

Cervantes' masterpiece presenting the contrast of idealism and imagination versus realism and practicality in a great novel. *Prerequisite: Span. 200, or equivalent.*

Span. 487-488 Independent Study

2 or 4 hours each

Span. 490 Senior Project 2-8 hours

Greek

Gr. 301 Hellenistic Greek I 4 hours

Introduction to the grammar of the Greek language in the Hellenistic Age. Primary emphasis is placed on the structure of the Greek of the New Testament.

Gr. 302 Hellenistic Greek II 4 hours

Continuation of Gr. 301 with greater emphasis upon syntax and reading of the Greek New Testament.

Gr. 401 Hellenistic Greek Readings I

4 hours

For students who have had a basic course in the Greek language. Facilitates the reading and interpretation of texts from the Septuagint, the New Testament, papyri, and early Christian writers.

Gr. 402 Hellenistic Greek Readings II

4 hours

Continuation of Gr. 401 with readings in early Christian literature.

Gr. 487-488 Independent Study

2 or 4 hours each

Foreign Language

F.L. 320 Seminar in Bilingual-Bicultural Studies 2 hours

A study of the needs of bilingual-bicultural education in the U.S., its history, current theories and practices.

F.L. 425 Introduction to Linguistics

2 hours

Basic concepts and terminology of linguistics. Required of all majors in the department.

F.L. 480 Methods and Materials in Teaching Foreign Languages 2 hours

Methods, teaching materials, lesson planning, and extracurricular activities necessary for the teacher of French, German, or Spanish as a foreign language. (May be taken for credit as Education 480.)

F.L. 481 Foreign Languages for Middle Childhood 2 hours

Methods, teaching materials, lesson planning, and extracurricular activities necessary for the middle childhood teacher of French, German, or Spanish as a foreign language. Special emphasis on aural-oral teaching techniques and characteristics of the transescent language learner.

F.L. 482 Methods and Materials in Bilingual-Bicultural Education 2 hours

Methods, teaching materials, lesson planning and extracurricular activities necessary for the teacher of bilingual-bicultural education. (May be taken for credit as Education 482.)

F.L. 487-488 Independent Study in Foreign Languages 2 or 4 hours

General Sciences

The division of General Sciences is a grouping of courses only. It is not a department and does not offer a field of concentration. It provides a number of programs, many of which are interdisciplinary in nature, designed principally for non-science majors. Some of these courses, however, such as the history of science, are excellent supplements to the college programs of science majors. In addition, special courses are offered for those who are interested in the teaching of science at the secondary school level.

Only students who have completed the following courses or their equivalents will be recommended for state certification to teach General Science in the secondary school: Bio. 100, and four additional Biology hours; Chem. 101, 102. Physics 201, 202. G.S. 201, 480. See the Education Department listings for required Professional Education courses. A second teaching field is required.

G.S. 100 Consumer Chemistry 4 hours
A course emphasizing an understanding of chemical concepts relevant to our everyday lives. At the end of this course, a student should be able to analyze and discuss magazine and newspaper articles dealing with the subjects related to chemistry. *This course is designed for non-science students.* (May be taken for credit as Chemistry 100.)

G.S. 101 Natural Philosophy 4 hours
(See Philosophy 352.)



G.S. 201 Astronomy 4 hours
Non-technical course in descriptive astronomy and cosmology, including such topics as the solar system, stars, galactic systems, telescopes, rocketry, and space travel.

G.S. 202 Physical and Cultural Geography 4 hours
Study of the physical processes tending to alter the climate and surface features of the earth and their consequent effects upon human populations.

G.S. 209 History and Philosophy of Science 4 hours
(See Philosophy 353.)

G.S. 210 Science, Technology, and Society 4 hours
Historical examination of the effects of scientific and technological innovations upon various societies, emphasis being placed upon technology and science of the western world since 1850.

G.S. 211 Energy, Conservation and the Environment 2 hours

This course will examine the energy supply/demand and environmental problems facing our society in the future, as well as the necessity of conservation of present resources. The interrelationships between energy available and economic, political, social and technological systems also will be explored.

G.S. 480 Methods and Materials in Teaching Physical and Life Sciences 4 hours

Aims and methods of teaching the physical and life sciences in the secondary schools. Special attention is given to teaching general laboratory procedures and techniques of teaching. Each of the departments in the physical and life sciences participates in the program. *Prerequisite: 16 hours in one of the physical or life sciences or permission of the instructor.*

G.S. 487-488 Independent Study
2 or 4 hours each

Geography

(See General Science 202 and Social Science 302.)

Graphics

(See Computer Science 400 and Fine and Applied Arts 404, 405, and 406.)



Health Science

Aims

The curriculum in Health Science is interdepartmental, providing the opportunity to earn a Bachelor of Science degree for students who have completed accredited allied health certification programs at other institutions.

In addition to the all-college graduation requirements, students in Health Science may choose among three specializations: Science, Management, and Education. These programs are designed to prepare allied health professionals for graduate or professional school, career changes within allied health fields, or management or educational positions in health professions agencies.

Requirements for a Degree in Health Science

Students admitted to this degree program must have completed an accredited allied health certification in areas such as respiratory therapy, radiology, or a comparable field.

In the *Science* area of specialization, students must complete 44 hours of

selected science courses, plus a Senior Project. These courses will include Chemistry 101, 102, 211, and 212; Physics 201 and 202; Mathematics 281; and 16 hours chosen from Biology 100, 167, 180, 343, 440, and 467.

In the *Management* area of specialization, students must complete 42 hours of selected courses, plus a Senior Project. These courses will include Accounting 211 and 212; Economics 111, 200, 280, 286, 287, and 290; Computer Science 140 or 144; Mathematics 281 and 282; and Communications 302.

In the *Education* area of specialization, students must complete 40 hours of selected courses, plus a Senior Project. These courses will include Education 201, 202, 349, 410, 428, and 470, as well as Education 311, 312, and 476. In addition, students will complete Psychology 100, and Sociology 100 and 362.

For course descriptions, see the listings in the respective departments. Further details of the program may be obtained from the Director of the Health Science Degree Program or the Office of the Dean of the Faculty.

Heuristics

Heuristics 301-302 2 hours each
Investigation and discovery of methodologies of problem-solving within a broad spectrum of academic disciplines and pragmatic pursuits. *Open to juniors and seniors only; permission of instructor required.*



History

Aims

To present the origin and development of institutions and ideas; to point out the great traditions that are molding our thought and action today; and to gain a better perspective of our political, economic, cultural, and social life.

Requirements for Field of Concentration

Twelve hours in European history, including History 301-302, 12 hours of American history, including History 201-202. Four hours in political science, four hours in either African or Asian or Latin American history, History 477, and a Senior Project. A related requirement is Interdisciplinary Studies 251 or 252, the other being strongly recommended. Students planning to attend graduate or professional schools should anticipate possible requirements in the areas of foreign language, statistics, accounting, and computer technology.

European and World History

Hist. 100 Western Civilization 4 hours
A survey of the Greek, Roman, Medieval and modern periods of western history. Cultural, diplomatic, economic, social and political topics are considered.

Hist. 297-298 Special Studies in History 2 or 4 hours
Designed to permit students to study with various faculty members in the department or with visiting instructors or other competent foreign visitors.

Hist. 301-302 Modern European History 4 hours each
Survey of European civilization from the Renaissance to the present. Second semester begins with 1815.

Hist. 327 British History 4 hours
A survey of British society to the Elizabethan period followed by a more detailed study of the Elizabethan period through World War II. Topics such as the nature of the 18th century politics, the Industrial Revolution, liberal and Victorian England, the impact of the World Wars on British society, and the "Irish Question" will be examined.

Hist. 351 Ancient Near Eastern Civilization 4 hours
(See Religious Studies 351.)

Hist. 353 Hellenistic Civilization 4 hours
(See Religious Studies 353.)

Hist. 381 History of the Middle East and North Africa 2 hours
Historical survey of the rise of the Islamic empires from the time of the Prophet, including the Caliphates, the classical period of Islam, and the Ottoman rule to the end of World War II.

Hist. 382 Cultural Life in the Middle East and North Africa 4 hours
Study of the cultural developments and impact of Islamic civilization, including religion, art, literature, philosophy, and law. (May be taken for credit as Religious Studies 382.)

Hist. 428 The Middle Ages 4 hours
Study of the decline of ancient civilization, the Byzantine and Islamic cultures, and especially the development of Western Europe to the 14th century.

Hist. 468 Revolution and Reaction in Modern History 4 hours
Comparative study of the English, American, French, and Russian revolutions. Emphasis is placed on the origins and characteristics of revolutions, the roles of revolutionary leaders, and the relationship of the 17th, 18th, and 19th century revolutions to contemporary struggles in the third world. (May be taken for credit as Politics and Public Policy 468.)

American History

Hist. 201-202 U.S. History 4 hours each
Political, economic, and social growth of America. First semester covers the period of exploration to 1865; second semester from 1865 to the present.

Hist. 225 West Virginia History, Government, and Geography 2 hours
History of the western section of Virginia to the Civil War and the history and government of West Virginia to the present. The physical, political, and social geography of the state is included. Field trips to various sections of the state are included as part of the course.

Hist. 275 Connections 2 hours
A television/seminar program that explores the relationships between technologies of the past and present. The flexible course design will appeal to students of varying backgrounds in science and technology.

Hist. 288 The American Political Novel 2 hours
Political life in the United States at the municipal, state, and federal level as reflected in a number of political novels since 1932. The course examines *Grapes of Wrath*, John Steinbeck; *It Can't Happen Here*, Sinclair Lewis; *All the King's Men*, Robert Penn Warren; *The Last Hurrah*, Edwin O'Connor; and *Advise and Consent*, Alan Drury, plus an additional book selected for each student. (May be taken for credit as Politics and Public Policy 288.)

Hist. 295 Local Architectural History 4 hours
Students will study and document the interrelationship between the architectural history of a clearly defined local region and the cultural, social and economic forces which shaped the area. Although most of the work will be done in the field, lectures, readings and surveys will be included. Each student will prepare a photographic and written analytic report of an important historical structure or area. *Prerequisite: Permission of the Instructor.*

Hist. 341 Development of the American Nation 4 hours
History of the United States from 1816 to 1861. Considers growth of American nationalism and sectionalism following the War of 1812; the rise of Jacksonian Democracy, territorial expansion, and the coming of the Civil War.

Hist. 342 Age of Big Business 4 hours
Political, social, and economic history of the U.S. from 1865 to 1914. Emphasis is placed on the growth of industrialism during this period and the resulting attempts at social reform.

Hist. 423 Contemporary U.S.

History 4 hours

The history of the United States since 1945. The course will include a brief review of the Progressive Era, the 1920s and the New Deal. Films, records, contemporary magazines, scholarly journals and newspapers will be used in addition to the text books.

Hist. 426 Latin America 4 hours

Study of the geography, politics, social composition, economic structure, history and problems of Latin America.

Hist. 465 Constitutional Law 4 hours

(See Politics and Public Policy 465.)

Hist. 477 Historical Writings and

Methods 2 hours

Study of the major works of the ancient, medieval, and modern European and American historians with emphasis on the various schools and methods of interpretation. The student also receives an introduction to the nature and methods of history as an intellectual discipline. Emphasis is placed on the technique of historical research, and the art of expression and critical analysis.

Hist. 487-488 Independent Study 2 or 4 hours each

Hist. 490 Senior Project 2-6 hours

Begins first semester of the senior year.



Interdisciplinary Studies

Aims

The interdisciplinary studies program recognizes that some students are more likely to achieve the goals of an "integrated education" and a "self-examined life," as set forth in the Bethany Plan, by designing their own cross-disciplinary field of concentration. The aim of the program is to facilitate such study by providing the machinery needed for its implementation and evaluation; by aiding the student in the study of interdisciplinary methods and problems; by critically evaluating the student's grasp of methods and materials of various disciplines; and by requiring the student to integrate his or her knowledge of materials and methods, derived from various disciplines, around a single problem or idea.

Requirements for Field of Concentration

The interdisciplinary studies program is designed to facilitate the faculty-sponsored or student-initiated program of study that cuts across departmental lines. The initiator of the program is responsible for establishing the content of the special curriculum, for stating the goals of the special curriculum, and for justifying the creation of a special curriculum. The Committee on Interdisciplinary Study approves or rejects the curriculum proposal. The

program must include at least 24 hours (excluding the Senior Project) in an approved core curriculum. The special curriculum may not exceed 72 hours. No more than 48 hours in any one department will be counted toward graduation. All work is supervised by the director of interdisciplinary studies. The director serves as the student's academic advisor throughout the program of study.

Admission to the Interdisciplinary Studies Program

It is recommended that all proposals for admission to the program be submitted to the director on or before the last day of the last semester of the student's sophomore year. Students who apply after this date may find that it will take them an extra summer or an extra semester to meet all requirements for graduation.

Student proposals must follow the outline provided by the Committee on Interdisciplinary Study and must be accompanied by proper supporting documents.

All proposals should be prepared in consultation with the director of interdisciplinary studies.

Senior Year

Senior Comprehensive Examination: Students must have completed at least 24 hours of study in their special curriculum (including all courses designed as required in the original proposal) before they are eligible to take the examination.

The Senior Comprehensive Examination will be designed to measure the student's grasp of methods and materials basic to the disciplines

emphasized in the core curriculum; to test the student's capacity for integrating materials and methods from the various disciplines; and to allow the student to evaluate the success of the special curriculum in light of his or her stated goals.

Senior Project: Students who wish to do 4-8 hour Senior Projects must have their programs approved by the director on or before the last day of the last semester of their junior year.

I.S. 100 Origins of Western Thought III: The Modern World 4 hours
(See Page 44.)

I.S. 201 World Hunger: The Quest for Survival 4 hours

An exploration of the problems of world food resources, production and distribution. Special emphasis will be placed on inequalities between the have's and have-not's, the effects of malnourishment on human behavior and on social and political conditions, and alternative technological and political solutions to the problem. (*Not open to Freshmen.*)

I.S. 202 Energy: The World Crisis 4 hours

An analysis of the current scarcity of energy resources required for the modern industrial world: its historical and geographical context, its psychological, social and political ramifications, and its possible consequences. Alternative technological solutions will be examined and evaluated. (*Not open to Freshmen.*)

I.S. 203 International Terrorism 4 hours

This course examines the origins, nature, cost, containment, and prevention of terrorism, violence, and revolution in today's world, focusing in particular on the reasons why many nations and peoples outside the ruling classes of the major developed nations turn to violence. (*Not open to Freshmen.*)

I.S. 204 Sex Roles: A Global Perspective 4 hours

A study of the changing roles of women and men in the world. Special attention is given to the traditional values of major human cultures and the repercussions of changing sex roles on those values and on society's institutions. (*Not open to Freshmen.*)

I.S. 210 The Origins of Life 4 hours

This interdisciplinary course focuses on the question "What is the probability that we, as humans, will encounter other life forms in the universe?". The main focus will concern the physical conditions necessary for the origin of life forms in the universe, particularly with respect to the origin of life on Earth. The history of ideas and concepts related to this question and a review of current theories and experimental work in this area will be covered. The economic, philosophical and attitudinal impact of this question on today's society will also be explored. This course is designed for those majoring in the Social Sciences and the Humanities, although it may be taken by those majoring in the Sciences. Appropriate laboratory experiences and demonstrations will be an integral part of the course. *(Not open to Freshmen.)*

I.S. 241 Multi-National Corporations and the Third World 4 hours

This course will examine the structure, operations and political and economic impact of U.S. multi-national corporations. Particular emphasis will be given to the activities of these corporations in third world nations. The course should provide perspective on multi-nationals as major actors on the international scene, and also sensitize students to some of the problems of developing nations.

I.S. 251 Origins of Western Thought I: The Ancient World 4 hours

Examination of ideal behavior as it emerges from and influences political, religious, scientific, philosophical, artistic, social and economic activity and thought from early Greece to the fall of Rome. *(Not open to Freshmen.)*

I.S. 252 Origins of Western Thought II: The Medieval and Renaissance World 4 hours

Examination of ideal behavior as it emerges from and influences political, religious, scientific, philosophical, artistic, social and economic activity and thought in the medieval and Renaissance periods. *(Not open to Freshmen.)*

I.S. 487-488 Independent Study 2 or 4 hours**I.S. 490 Senior Project 4-8 hours**

Library

Aims

The T. W. Phillips Memorial Library provides a variety of educational services to the Bethany College community through an experienced and well-trained staff and a wealth of learning resources. The librarians view their purpose in the following ways: to provide materials which support the Bethany curriculum and the individual

projects of students, to encourage students to ask questions and to assist them in their search for answers through the teaching of bibliographic skills, to help students develop a love of books and an awareness of the vast amount of information available throughout the world, and to develop an understanding of the importance to individuals and to societies of having access to information.

Mathematics

Aims

To provide the general student with a knowledge of the foundations of mathematics; to give the prospective teacher an understanding and appreciation of the fundamental ideas of elementary mathematics; to provide a tool for the technical student; and to give the prospective graduate student a foundation for later study and research.

Requirements for Field of Concentration

The student is required to take the following 24 hours in the department: Math. 201, Calculus I; Math. 202, Calculus II; Math. 203, Calculus III; Math. 354, Linear Algebra; Math. 400, Abstract Algebra; Math. 401, Advanced Calculus.

The student also must complete a Senior Project. In addition, each student must complete one of the following tracks:

Mathematics: CS 142, 143, or 201; twelve hours from the following: Math. 326, 341, 344, 390, 383, 384.

Mathematics-Economics: Math 231, 281, 282; Acct. 211; Eco 200, 301, 302; CS 144 or 145.

Mathematics-Physics: Math 341; Physics 201, 202 (251 or 261), 300; CS 142 or 143.

Mathematics-Computer Science: CS 142 or 143; 201, 202, 290, 390; Math 341.

Mathematics-Education: Math 103, 201, 202, 203, 240, 281, 326, 354, 400, 401, 480; CS 140 or 201; and Ed 345.

Only students who have completed the Mathematics-Education track will be recommended for state certification to teach mathematics in secondary school. See the Education Department listings for required Professional Education courses. A second teaching field is required.

Math. 103 Elementary Algebra 4 hours
Designed to prepare the student to take Calculus I. Sets and operations on sets, number systems, solutions to equations, inequalities, functions and graphing, conic sections, synthetic division and the remainder theorem, exponential and logarithm functions, computation with common logarithms. *May not be taken if credit has been earned for Math 201.*

Math. 104 Trigonometry 2 hours
Radian measure, trigonometric functions and their graphs. fundamental identities, conditional trigonometric equations, inverse trigonometric functions, vectors, complex numbers. DeMoivre's Theorem. *The material covered in this course is necessary background for Math. 202: Calculus II.*

Math. 141 Mathematics for the Liberal Arts Student 4 hours
Introduces the non-science major to the spirit and flavor of mathematics. Stresses fundamental concepts with the aim of clarifying the importance of mathematics in relation to other branches of knowledge. Topics that may be covered include sets, logic, the number concept, history of mathematics, the nature and use of geometry, computers, computer programming, and logical puzzles.

Math. 152 Finite Mathematics 4 hours
Intended primarily for students of the biological or social sciences. It is also recommended for non-science majors desiring an acquaintance with mathematics. It is not a precalculus course. Concepts studied include logic, set theory, matrices, probability theory, linear programming, and game theory.

Math. 201 Calculus I 4 hours
Real number system, equations of a line, study of the circle and parabola, functions, limits, and continuity. Techniques of differentiation and integration applied to maximum and minimum problems and to related rates. *Prerequisite:* 3½ years of high school math or Math. 103 or permission of the instructor.

Math. 202 Calculus II 4 hours
Area between two curves, volumes of revolution, moments, centroids, hydrostatic pressure, and work. Integration and differentiation of transcendental functions. Methods of integration including integration by parts, partial fractions, and trigonometric substitution. Polar coordinates and graphs, area, and angles of intersection in polar coordinates. *Prerequisites:* Math. 104 or high school equivalent; and Math. 201 or advanced placement.

Math. 203 Calculus III 4 hours
Intermediate calculus with emphasis on vector methods and functions of several variables. Scalar and vector products. Partial differentiation and applications, directional derivative and gradient. Multiple integrals with physical applications. Expansion of functions. L'Hospital rule, sequences, and series. *Prerequisite:* Math. 202.

Math. 210 Discrete Structures 4 hours
(See Computer Science 210.)

Math. 231 Quantitative Methods in Management 2 hours

This course deals with applications of matrix algebra to business and economics, including problems involving cost minimization and profit maximization. (The necessary matrix algebra will be developed in the course.) *Primarily designed for students who intend to pursue a career in business. Prerequisite: Math 103 or equivalent.*

Math. 250 Mathematics for Early and Middle Childhood 4 hours

A course designed in content and teaching style for early and middle childhood pre-service teachers. The course will emphasize active student participation and a field placement component which will permit the students to develop materials and evaluation instruments as well as practice the teaching of mathematics concepts including: the structure of the number systems, real number properties and the computation derived from them, problem solving strategies, and geometry and measurement. *Required for Middle Childhood. Enrollment by permission of the instructor. (Not open to Freshmen.)*

Math. 281 Statistical Methods 4 hours
Introductory statistical analysis including frequency distribution and graphic presentation of data, measures of central tendency, relative positions in a distribution, variability, the normal curve and its applications, correlation and regression, probability and statistical inference, testing differences between means, introduction to analysis of variance. (Not open to students in the general program.)

Math. 282 Statistical Methods II 2 hours
Testing goodness of fit, contingency tables, regression and correlation analysis, analysis of variance, non-parametric methods.

Math. 326 Introduction to Modern Geometry 4 hours

Euclidean and non-Euclidean geometries; an introduction to synthetic projective geometry; the concept of limit and infinity; geometrical constructions, recent developments and theorems. *Prerequisites: Math. 201, 202, or permission of the instructor.*



Math. 341 Differential Equations

4 hours
Methods of solution of ordinary and partial differential equations and applications to the physical sciences. *Prerequisite: Math. 202.*

Math. 344 Complex Variables 2 hours

Complex numbers, elementary functions, analytic functions, contour integration, Taylor and Laurent series, conformal mapping, boundary value problems, Laplacian equations. *Prerequisite: Math. 203.*

Math. 354 Linear Algebra 4 hours

Geometric vectors, matrices and linear equations, real vector spaces, linear transformations and matrices, and inner product spaces.

Math. 383 Probability & Statistics I

4 hours
Introduction to probability, basic distribution theory, limit theorems, mathematical expectation, probability densities, random variables, sampling distributions, point and interval estimation, tests of hypotheses, regression and correlation, analysis of variance. *Prerequisite: Math. 202 or permission of the instructor.*

Math. 384 Probability & Statistics II

2 hours
In this course, the student will apply the concepts of probability to statistical procedures such as sampling estimations, tests of hypothesis, regression theory, and Bayesian methods. *Prerequisite: Math. 383.*

Math. 390 Numerical Analysis 4 hours
Numerical methods in evaluating integrals and differential equations. Techniques in finding the roots of polynomials and solving systems of linear equations and matrix manipulation. *Prerequisites: CS 142, 143 or 201 and Math. 201, 202. (May be taken for credit as Computer Science 390.)*

Math. 400 Modern Abstract Algebra

4 hours
Groups, rings, integral domains, fields, and vector spaces.

Math. 401 Advanced Calculus 4 hours
The Jacobian, Lagrange multipliers, limits and continuity, completeness of the Real numbers, sequences, series, Fourier series and orthogonal functions, partial differential equations, Implicit Function Theorem. *Prerequisite: Math. 203.*

Math. 478 Senior Seminar 2 hours

An examination of the historical development and cultural significance of mathematics. A study of modern trends in mathematical thought and application as revealed in the literature. An analysis of career opportunities in mathematics.

Math. 480 Methods and Materials in Teaching Mathematics 2 hours

Approved methods in teaching mathematics at the secondary level; class period activities of the teacher; procedures and devices in teaching; organization of materials, testing, aims, and modern trends. (May be taken for credit as Education 480.)

Math. 487-488 Independent Study 2 or 4 hours

Math. 490 Senior Project 2-8 hours

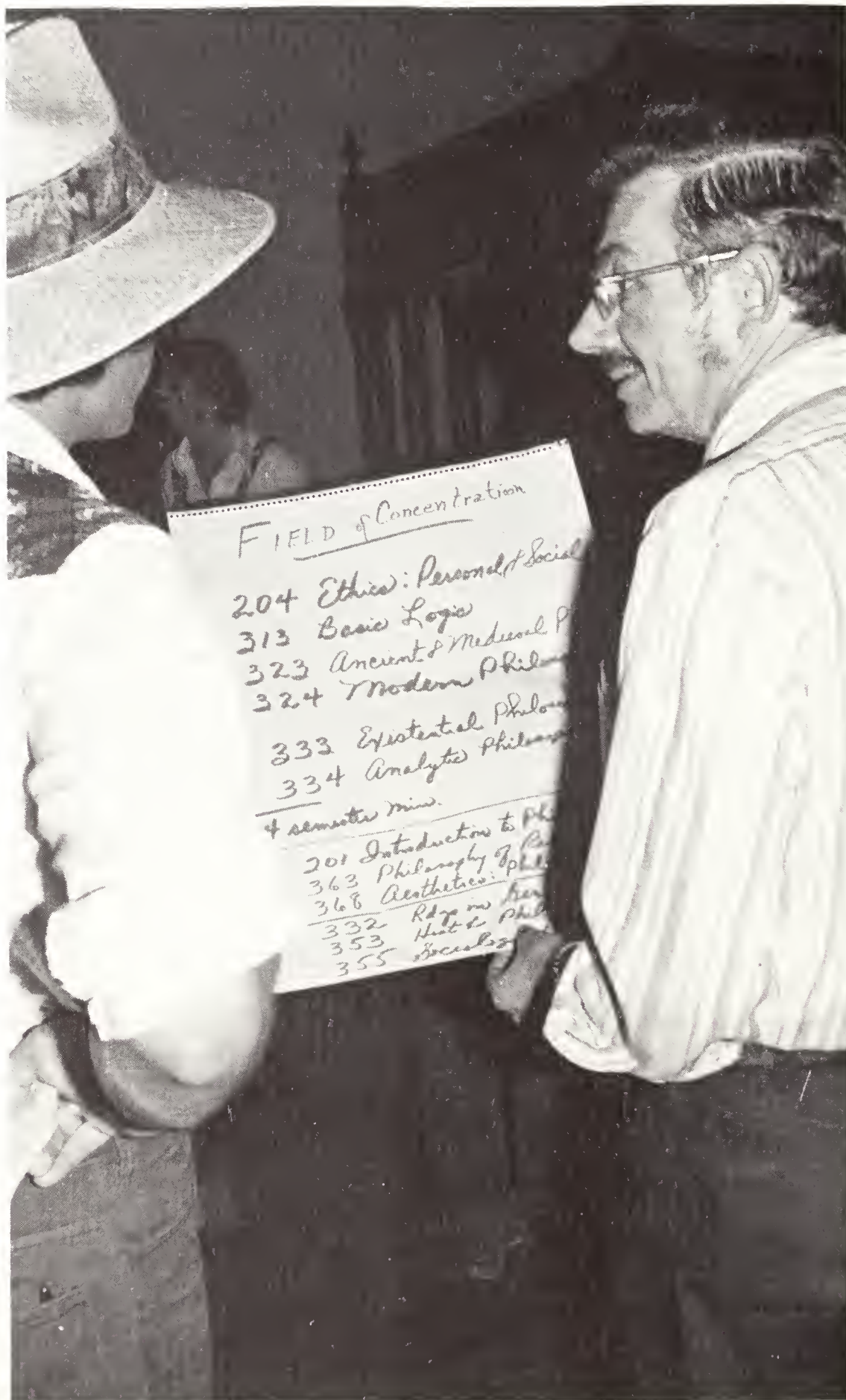
Philosophy

Aims

To assist the student in discovering and developing sound bases for interpreting self and society through a careful examination of his or her beliefs, actions, and claims to knowledge; to assist the student in becoming aware of the nature and status of philosophical problems, commitments, ideologies, and models that serve as the foundation of human life; and to provide the student who expects to pursue graduate studies in philosophy with a sound basis in the major areas of the field.

Requirements for Field of Concentration

Concentration in philosophy may hold promise for several students as one way to achieve a liberal education. For others, philosophy may be an important related field; or it may serve as a good foundation for those planning for graduate work in another field as well as for those who are professionally interested in philosophy.



Concentration in philosophy requires satisfactory completion of a minimum of 24 hours, including Philosophy 123, 124, 323, 324, 325, plus a Senior Project, and Senior Comprehensive Examination. The Senior Project is received and evaluated in the final semester of the student's academic program. Related requirements are Interdisciplinary Studies 251, 252.

The student who is considering graduate work should be aware that many good graduate programs in philosophy require a reading knowledge of French and German.

Phil. 100 Introduction to Philosophy 4 hours

Intended primarily to involve students in an introductory exploration into the range of problems with which philosophers wrestle. "Living issues" confront us in such vital areas as: the nature of self, man, mind, values, knowing, freedom, and of philosophy, philosophic outlooks, and religious traditions.

Phil. 123 Basic Logic 4 hours

Students are assisted in developing the ability to recognize the differences between emotional intensity and valid argument, between verbal disputes and conclusions that follow (logically) from premises. Recognition of the bases of these differences and development of the very practical abilities to recognize, construct, and analyze various forms of argument and to detect logical errors (fallacies) are important objectives of the course.

Phil. 124 Ethics: Personal and Social 4 hours

Examination of different personal and social foundations upon which ethics or morals can be (and have been) built – such as pleasure, happiness, feeling, reason, obligation, usefulness, and relativism; significant moral problems in several areas of life and work; and basic criteria for moral decision-making.

Phil. 250-259 Special Topics in Philosophy 2 or 4 hours

Phil. 252 Philosophy of Mysticism

4 hours

Examination of what is involved in the experience and claims of several mystical groups or representatives, from ancient to contemporary times. Emphasis will focus on trying to understand the basic claims that mystics make, assessing the kinds of certainty, truth and insight claimed, and exploring the place of "the mystical" in human experience.

Phil. 254 Contemporary Ethical

Issues 4 hours

Orientation to the relatively new attitude toward normative ethical issues; identification and examination of key normative concepts and principles (e.g., honesty, fidelity, loyalty; obligation; autonomy—dependence, paternalism; freedom; justice; self-respect and dignity; and rights) and problems that cut across several areas of social and professional life; and exploration of how these concepts and principles are involved in attempts to solve moral problems in the domains of social life and vocational life in, e.g., public policy, business, and mass communications.

Phil. 323 Ancient and Medieval Philosophy 4 hours

Begins with the seventh century B.C. Greek mythic interpretations and moves through early Nature Philosophies, Scepticism, Greek Humanism, the Golden Age, the Roman Period, and the relationship of religion and philosophy in the Medieval Period.

Phil. 324 Modern Philosophy: From the Renaissance Through the 19th Century 4 hours

Begins with the New Learning and moves through the rise of "the scientific spirit," the development of British Empiricism and Continental Rationalism, Kant's "revolutionary" impact on philosophy, and the major thought forms of the 19th Century.

Phil. 325 Twentieth Century Philosophies 4 hours

A survey of the dominant philosophic forms from Bergson, Dewey and Whitehead through the rise of realism, logical analysis, phenomenology-existentialism and language studies.

Phil. 350-359 Advanced Topics in Philosophy 2 or 4 hours

Phil. 352 Natural Philosophy 4 hours

Examination of the physical universe and man's place in it through an emphasis upon the ways in which the physical sciences have altered and are now altering man's understanding of the universe. (May be taken for credit as General Sciences 101.)

Phil. 353 History and Philosophy of Science 4 hours

Study of some of the major ideas conceived by western man in attempting to comprehend and describe the natural world. *Prerequisite: one year of college level science or permission of the instructor.* (May be taken for credit as General Sciences 209.)

Phil. 355 Philosophy of Religion 2 or 4 hours

Examination of the major aspects of religion from a philosophic perspective. Study will include: the religious experience, the meaning and significance of faith, belief and criteria, knowledge, proof, evidence and certainty, concept of deity, scope and impact of religion in human life.

Phil. 358 Aesthetics, The Arts, and Philosophy 2 or 4 hours

Examination of the nature of aesthetic experience and its relation to other kinds of experience, as well as its place in art production, appreciation and creativity; the notion of "a work of art"; language used in description, interpretation, and evaluation of art; and different interpretations of aesthetics. Opportunities are provided for giving special attention to particular art areas as well as to "the Arts."

Phil. 477-478 Senior Seminar 2 hours each

This seminar seldom consists of a general review of all areas of philosophy; the topic or particular area of study is chosen as a result of student and faculty conferences. Student ability, interest, and need are important factors. *Conferences with and permission of the head of the department are required before enrollment.*

Phil. 487-488 Independent Study 2 or 4 hours each

Phil. 490 Senior Project 2-8 hours



Physical Education

Aims

To enhance the health of the student; to provide opportunities for students to participate and develop proficiency in sport activities; and to prepare students for professional careers in physical education, recreation, athletic coaching in educational, agency and/or municipal institutions, and sports communication.

Requirements for Field of Concentration – Physical Education

A minimum of 44 hours in the department, which must include P.E. 101, 110, 226, 243, 244, 310, 426, 427, 479, 480, 481, 486, and 490 or their equivalents. Additionally, all students must take Biology 100 and 167, as well as Education 201 and 202.

Optional Program Opportunities:

1. To be recommended for state certification, K-12 students must complete the requirements for the field of concentration and 230, 231. Electives chosen should include four hours selected from P.E. 309, 340, 355 and four hours elective clinics. See the Education Department listings for the required Professional Education courses. A second teaching field is required.



2. To be recommended for state certification 7-9 or 7-12, a minimum of 34 hours in Physical Education is required. This must include the following: P.E. 101, 110, 226, 230, 231, 243, 244, 426, 427, 479, 480; four hours selected from P.E. 309, 340, 355 and four hours elective clinics. Students also must complete Bio. 100 and 167. See the Education Department listings for required Professional Education courses. A second field is required.

3. For non-physical education majors, an emphasis in coaching is available. Eighteen hours are required which must include Biology 167, P.E. 355, 340, 485, and two hours selected from P.E. 300-305. Electives include P.E. 243, 244, 426 or 427.

Requirements for Field of Concentration – Leisure Studies

A. Leisure Management – A minimum of 38 hours in the department which must include 110, 120, 167, 226, 243, 244, 280, 290, 385, 386, 426, 427, 476, 490 and two hours of performance. Additionally, all students must take Accounting 211; Biology 100; Economics 200, 280, 290, 312.

B. Leisure Services – A minimum of 44 hours in the department which must include 110, 120, 167, 226, 243, 244, 280, 290, 309, 385, 386, 426, 427, 476, 480, 490, and two hours of performance. Additionally, all students must take Accounting 211; Biology 100; Economics 200, 280; Fine and Applied Arts 340; Fine and Applied Arts 120, and two hours of Fine and Applied Arts in Theatre.

The following courses are recommended: Soc. 361, 362; Pol. 227.

A department-approved internship in leisure field is required.

P.E. 100-165 Physical Education Performance Courses

Skills in performances, knowledge of strategies, rules, equipment and methods, and participation in sport forms. For non-majors, a maximum of four hours may be credited toward graduation requirements. Specific requirements of majors, six hours (excluding P.E. 150-163), but not to exceed 10 hours.

Courses Available

- P.E. 101 Gymnastics/Dance
- P.E. 110 Aquatics (Advanced Life Saving)
- P.E. 111 Swimming (Basic - Advanced)
- P.E. 120 Folk Dance
- P.E. 121 Horseback Riding
- P.E. 130 Golf - Handball - Paddle Ball
- P.E. 131 Orienteering
- P.E. 132 Archery - Table Tennis
- P.E. 134 Body Mechanics
- P.E. 135 Tennis - Badminton
- P.E. 137 Modern Dance - Rhythms
- P.E. 139 Physical Fitness
- P.E. 140 Field Hockey - Softball
- P.E. 141 Aerobics
- P.E. 142 Track & Field - Wrestling
- P.E. 144 Soccer - Volleyball
- P.E. 146 Football - Wrestling
- P.E. 150 Varsity Baseball
- P.E. 151 Varsity Basketball (M)
- P.E. 152 Varsity Basketball (W)
- P.E. 153 Varsity Cross Country
- P.E. 154 Varsity Field Hockey
- P.E. 155 Varsity Football
- P.E. 156 Varsity Golf
- P.E. 157 Varsity Soccer
- P.E. 158 Varsity Swimming
- P.E. 159 Varsity Tennis (M)
- P.E. 160 Varsity Tennis (W)
- P.E. 161 Varsity Track
- P.E. 162 Varsity Volleyball
- P.E. 163 Varsity Softball

Recommended Sequence of Courses for Physical Education Majors

First Semester	Credit	Second Semester	Credit
Freshman			
Bio. 100 Modern Concepts in Life Science	4	Bio. 167 Introduction to Mammalian Anatomy and Physiology	4
		Psych. 100 General Psychology	4
Sophomore			
P. E. 226 First Aid	2	P. E. 244 Philosophical-Historical Perspective*	4
Ed. 201 Human Development I	4	Ed. 202 Human Development	4
P. E. 243 Socio-Psychological Perspective*	4	Ed. 242 Principles and Curriculum in the Public Schools	2
P. E. 230 Lab Analysis – Team	2	P. E. 231 Lab Analysis – Individual	2
Junior			
P. E. 479 Teaching Physical Education I	4	Ed. 348 Professional Practicum	4
P. E. 310 Adapted Physical Education	2	P. E. 426 Kinesiology	2
P. E. 110 Aquatics	1	P. E. 427 Physiology	2
P. E. – Clinic (300-308)	2	P. E. 480 Teaching Physical Education II	4
		P. E. 481 Elementary School Physical Education	2
		P. E. 101 Gymnastics	1
Senior			
Sp. Ed. 410 Tests and Measurements	2	P. E. 486 Issues in Sport	2
Ed. 401 History and Philosophy of Education	2	P. E. 490 Senior Project	2-8
Ed. 428 Principles and Techniques of Secondary Education	4	P. E. – Elective	2-4
Ed. 470 Observation and Directed Teaching	8	P. E. – Clinic (300-308)	2

* P. E. 243-244 may be taken in the freshman year but Soc. 100, Psych. 100, and/or Phil. 100 are recommended as prerequisites.



P.E. 167 Introduction to Mammalian Anatomy and Physiology 4 hours
(See Biology 167.)

P.E. 200-225 Physical Education Performance Courses 1 hour each
Advanced skills in performance, advanced knowledge of rules, equipment and methods; participation in sport forums. Open to non-majors. *Prerequisite: successful completion of 100 level performance course.*

Courses Available

P.E. 201 Gymnastics

P.E. 210 Aquatics WSI

P.E. 222 Archery - Table Tennis

P.E. 224 Tennis - Badminton

P.E. 226 First Aid as Related to the Principles of Biology 2 hours
(See Biology 105.)

P.E. 227 Personal and Community Health 4 hours

Fundamental knowledge of personal and community health matters pertaining to the social group: communicable diseases, vital statistics, and legal and social regulations.

P.E. 230 Lab Analysis – Team 2 hours
Emphasis on skill development and analysis and cognitive acquisition of rules, equipment, strategies and methods. Sports covered include soccer, volleyball, field hockey, football, basketball, softball.

P.E. 231 Lab Analysis – Individual

2 hours

Emphasis on skill development and analysis and cognitive acquisition of rules, equipment, strategies and methods. Sports covered include archery, badminton, dance, golf, tennis, track and field.

P.E. 243 Socio-Psychological Perspective 4 hours

Consideration of small sport groups as micro-social systems; application of group dynamics theory and small group research to the study of sport groups; investigation of the influence of group member characteristics, environmental factors, interpersonal relations, and group structural characteristics on individual member adjustment and group effectiveness. Designed to investigate those aspects of psychology which influence the performance and the participant in sport. Additional factors such as motives, arousal, aggression, and other socio-psychological variables will be covered.

P.E. 244 Philosophical-Historical Perspective 4 hours

Philosophical inquiry into physical education. Consideration given to general philosophical interpretation of the nature and purpose of physical education. Review of the historical and philosophical changes in American education with emphasis on the developing roles of professional physical education.

P.E. 280 Leisure in Socio-Cultural Patterns 4 hours

Leisure philosophies in the history of man; leisure values reflected in the culture; factors affecting leisure such as demography, technology, and population; social meaning and scope of leisure.

P.E. 290 Leisure and Human Behavior 4 hours

Motivation and leisure behavior; physiological and activity outcomes; man as a social organism; emergence of leadership in leisure pursuits.

P.E. 300-308 Clinics 2 hours each

The major purpose of the sport clinic is to prepare a student to teach the sport or activity(ies) within any phase of the total school environment. Emphasis should be placed on theory (e.g. football theory) and teaching methodology(ies), both skill and theory. Skill advancement should not be an objective of a sport clinic but may be an outcome.

Courses:

P.E. 300	Basketball-Tennis-Golf	2
P.E. 301	Aquatics-Baseball	2
P.E. 302	Track & Field-Soccer	2
P.E. 303	Football-Wrestling	2
P.E. 304	Field Hockey-Volleyball	2
P.E. 305	Games and Sports for Children	2
P.E. 306	Gymnastics	2

P.E. 309 Intramural Sports 2 hours
Organization, administration, and objectives of the intramural athletic programs.

P.E. 310 Adapted Physical Education 2 hours

Variations of the normal types of the human organism at different age levels; therapeutic measures, especially those which correct mechanical defects.

P.E. 340 Prevention and Care of Injuries 2 hours

Common hazards of play and athletics. Preventive measures and treatment of injuries. Red Cross First Aid Certificate may be earned by those who pass the examination. Laboratory fee: \$30.

P.E. 341 Advanced Athletic Training 4 hours

Major emphasis is placed on those skills needed by personnel involved in the field of sports medicine. Orthopedic evaluations of injuries, treatment of crisis situations, and study of conditioning and rehabilitation programs will be covered. *Prerequisites: P.E. 340, 426, 427.* Laboratory fee: \$30

P.E. 350 Sports Information 2 hours

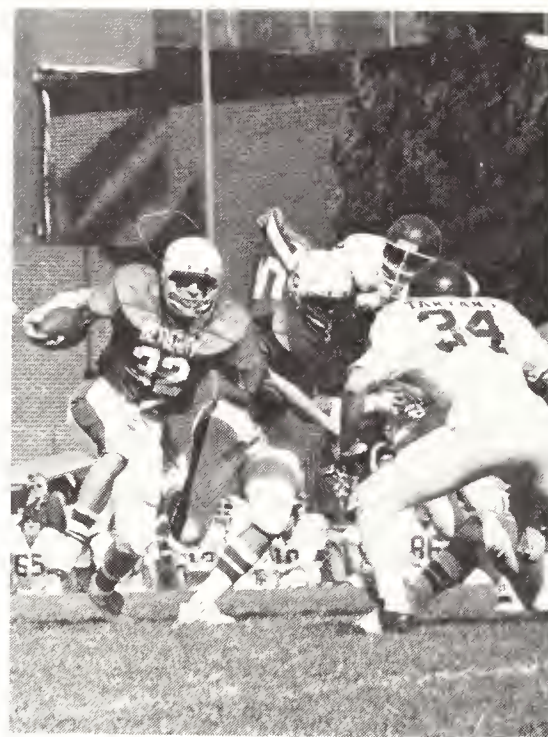
Examination of the varied duties and functions of the sports information director. Special emphasis will be on writing general press releases, fact sheets, and special features; special team and individual promotions, and proper press box procedures, statistics and reporting results. Some attention will be given to photography and use of media.

P.E. 355 Coaching Sport 2 hours
Basic philosophy and principles of athletics as integral parts of physical education and general education. State, local and national regulations and recommendations related to athletics; legal considerations; function and organization of leagues and athletic associations; personal standards and responsibilities of the coach as a leader; public relations; general safety procedures; general principles of budgets, records, purchasing and facilities.

P.E. 385 Fundamentals of Camping 2 hours
History and philosophy of camping; organization of established camping principles and applied techniques of camping; supervision of counselorship in established camps.

P.E. 386 Therapeutic Use of Leisure 2 hours
Leisure activities for the maintenance of healthy levels of fitness within limitations of disability; physical and social skills directed toward rehabilitation; meeting needs of disabled individuals based upon abilities, interests, limitations and psycho-social characteristics.

P.E. 426 Kinesiology 2 hours
Anatomy and mechanics applied in the study of the human body during physical exercise; with special emphasis on the analysis of motion in specific sports skills and exercise patterns. *Prerequisite: Biology 167.*



P.E. 427 Physiology of Muscular Activity 2 hours
Anatomy and physiology applied in the study of the human body during physical exercise; with special emphasis on the application of physiological variables in specific sports skills and exercise patterns. *Prerequisite: Bio. 167.*

P.E. 470 Contemporary Problems in Health 2 hours
Study of current health problems, including mental health, nutrition, accidents, physical fitness, and drug education.

P.E. 471 Planned Family and Sex Education 2 hours
Methods and techniques of teaching sex education in the educational system, including such topics as dating, marriage adjustments, pregnancy and the reproductive systems, family planning and fertility control, and divorce.

P.E. 476 Management and Organization of Leisure Services 2 hours
Treatment of management principles and practices and personnel administration: development of management skills; overview of personality and motivation theories serves as a basic focus. Analysis of leisure organizations, including theoretical concepts of organizational planning, goal-setting, executing, and evaluating. Mode of motivation and the impact of individual and group structure.

P.E. 479-480 Teaching Physical Education I & II 4 hours each
Analysis of current methods, materials and techniques pertinent to teaching and administering physical education and athletics. Development of an understanding of the formative and summative evaluation process in the cognitive, affective and psychomotor domains of physical education. Emphasis is given to data-collection techniques (measurement), data-manipulation (statistics), data evaluation and data interpretation in view of teaching. Integration of administrative processes and techniques with teaching and evaluation. Must be taken in sequence.

P.E. 481 Elementary School Physical Education 2 hours
Teaching physical education at the elementary level. A study of this age group's physical, motor, social, and emotional development, plus activities contributing to proper physical development.

P.E. 485 Participation in Coaching 2 hours
Required participation and scheduled seminars for those with no coaching experience. Student is assigned for a sport season to assist in coaching at the interscholastic or intercollegiate level. Assignment of students shall be dependent on master of the sport. *Prerequisite: Permission of the department head.*

P.E. 486 Issues in Sport 2 hours
Analysis of the origins, effects, and implications of current developments in theoretical aspects of physical education, sport, and leisure. Description and explanation of the nature and purpose of sport activities in relation to their conduct in an education, leisure and/or athletic setting. Includes discussion, directed reading and individual study related to the impact of issues, concepts and trends in the areas of education, leisure or athletics.

P.E. 487-488 Independent Study 2 or 4 hours each

P.E. 490 Senior Project 2-8 hours

Physics

Aims

To introduce students to the current body of knowledge expressing the physicist's concepts of the universe and its physical laws; to provide courses serving the needs of liberal arts students who are concentrating in physics or are interested in the physical and life sciences, medicine, optometry, therapy, engineering, or teaching. Students may choose from a variety of courses to satisfy a distribution requirement, to attain enough competence for a future career in a related field, or to attain sufficient breadth and depth to pursue an advanced degree in physics.

Requirements for Field of Concentration

A minimum of 36 hours in the department, including Physics 201, 202, either 221 or 222, 251, 261, 300, 303, 314, 316, 318 and either 305 or 306, plus a Senior Project. Those students expecting to do graduate work are urged to take both 221 and 222 and both 305 and 306. Mathematics and chemistry are strongly recommended as related fields.

A combined plan with Case Western Reserve University, Columbia University, a dual-degree program with Georgia Institute of Technology, and a Three-Two Plan with Washington University are available to students interested in various engineering or industrial management degrees. Special programs are offered in cooperation with the Education Department for students interested in meeting the



demand for teachers of physics, particularly in upper middle and secondary schools. The required courses in the Physics Department are the following 28 hours: Physics 201, 202, 221, 251, 261, 300, 318, and either 305 or 306. See the Education Department listings for additional required courses in that department. A second teaching field is required. Additional courses in Computer Science, General Science and Physics are suggested for additional interest.

Students interested in careers in engineering, industrial management, mathematical modeling, etc., which might require a background in physics-mathematics-economics-chemistry, are encouraged to speak to the appropriate department head and the director of the dual degree engineering program, or to the director of interdisciplinary studies if they wish to design an interdisciplinary program of study more suited to their career goals than a traditional departmental program.

Phys. 201-202 General Physics 4 hours each

First Semester: mechanics, heat, and wave phenomena. Second Semester: electricity and magnetism, light and selected topics in atomic and nuclear physics. Specifically intended for science, engineering, and other students who have had or are concurrently taking calculus. *Three hours of lecture and three hours of lab each week.*

Phys. 221 Introductory Electronics 4 hours

Introduction to electrical and electronic circuits and their elements, with an emphasis on applications. *Prerequisite: Phys. 201-202, or permission of the head of the department.*

Phys. 222 Digital Electronics 4 hours

An introduction to digital electronics with applications in instrumentation and computer electronics. Topics include Boolean Algebra, basic gates, logic families, encoders-decoders, astable/monostable multivibrators, flip-flops, counters, readouts, shift registers, bi-directional bus structure, serial-parallel/parallel-serial data conversion., D to A and A to D conversion. *Three hours of lecture and two hours of lab each week. Prerequisite: Math. 103 or equivalent or permission of the head of the department.* (May be taken for credit as Computer Science 222.)

Phys. 251 Mechanics 4 hours

Particle mechanics, central force motions, motions of rigid bodies, free, forced and coupled oscillations, rotations about an axis, moving coordinates systems, conservation theorems, Lagrange's equations, relativistic mechanics, mechanics of continuous media, and theory of small vibration. *Prerequisite: Physics 201-202.*

Phys. 261 Electricity and Magnetism 4 hours

Electrostatics, magnetostatics, scalar and vector fields, Poynting's vector, electrodynamics, Maxwell's equations, boundary conditions, and wave propagation. *Prerequisite: Phys. 201-202.*

Phys. 300 Modern Physics 4 hours

A presentation, based on mathematical and physical reasoning, of the foundations of modern physics. Treats the subjects of special relativity, kinetic theory, atomic theory, and introductory quantum mechanics on the level of the Schroedinger equation. *Intended for chemistry, mathematics, physics, or pre-engineering majors. Prerequisite: Phys. 201-202 or permission of the head of the department.*

Phys. 303 Statistical Thermodynamics 4 hours

Study of macroscopic systems of many atoms or molecules which provides an introduction to the subjects of statistical mechanics, kinetic theory, thermodynamics, and heat. *Material emphasizes concepts useful to those majoring in physics, chemistry, and pre-engineering. Prerequisite: Phys. 201-202.*

Phys. 305 Geometric Optics 2 hours

The study of light from a non-wave theory standpoint. This course includes the study of reflection, and optical instruments. *Prerequisite: Phys. 201-202 or permission of the head of the department.*

Phys. 306 Physical Optics 2 hours

Topics covered in this course include interference dispersion, diffraction, polarization, electro-magnetic nature of light, and quantum optics. *Prerequisite: Phys. 201-202.*

Phys. 314 Introduction to Classical Quantum Mechanics 2 hours

Continuation of the study of classical quantum mechanics begun in Phys. 300. Topics include the three-dimensional Schroedinger equation, selection rules, addition of angular momentum, fine structure in hydrogen, exchange symmetry, the Zeeman effect, and stimulated emission. *Prerequisite: Phys. 300 or permission of the head of the department.*



Phys. 316 Selected Topics in Solid State and Nuclear Physics 2 hours

Continuation of the study of modern physics. Topics include molecular bonding and spectra, free-electron theory of metals, band theory of solids, superconductivity, nuclear shell model, radioactivity, nuclear reactions, and elementary particles. *Prerequisite:* Phys. 314 or permission of the head of the department.

Phys. 318 Advanced Physics Lab 2 hours

Experiments concerning topics covered in Phys. 300 are emphasized.

Phys. 477 Seminar in Physics 2 hours
Survey of physics for review and correlation of various fields within the discipline. *Prerequisite:* Permission of the head of the department.

Phys. 480 Methods and Materials in Teaching Physical and Life Sciences 4 hours

For course description see General Sciences 480. (May be taken for credit as Education 480.)

Phys. 487-488 Independent Study 2 or 4 hours each

Phys. 490 Senior Project 2-6 hours
Research problems in theoretical or experimental physics. Experimental physics is offered in such areas as: vacuum systems, machine tool operation, electron systems, spectroscopy, electron microscopy, microwave propagation, nuclear radiation and computer science. Theoretical physics projects are unlimited in scope and are arranged through consultation with the student's faculty advisor.

Politics and Public Policy

Aims

To provide for the study of American politics, political institutions and processes, patterns of political behavior, and international relations, and how these areas are related to the making of public policy; to prepare students for graduate or professional school; to enhance the career objectives of students in the theoretical, technical, and practical dimensions of administration, management, and policy in both the public and private sectors.

Requirements for Field of Concentration

Students are required to complete a minimum of 38 hours in the department exclusive of the Senior Project. All students will complete Pol. 225 and Pol. 478 plus at least 16 additional hours of classroom based courses and at least a 4-hour Internship. Related requirements are History 201-202. Cognate courses are recommended in History, Philosophy, Economics and Business, Sociology, Foreign Languages, Communications, Mathematics (especially statistics), Computer Science, and selected areas of science and technology.

Pol. 225 American Government 4 hours
Introduction to the formal and informal institutions and processes which comprise the American political system at the national level. Emphasis is placed on the mechanics of policy making and the behavior and attitudes of the American electorate.

Pol. 227-228 Intergovernmental Relations 2 hours each

This topic is presented in two half-semester courses. The first covers the introductory material on state and local governments, including U.S. constitutional provisions about states, varieties of state constitutions, typical powers of governors, state legislatures and state executive agencies, the arrangement of state courts and their importance. Major program responsibilities of state and local governments will also be covered here.

The second course will examine the development of the federal-state relationship and recent developments in federal-state and federal-local relations. The major topics included are joint programming, the grant-in-aid system, revenue sharing, and current issues and proposals regarding federal and state program responsibilities. The implications of federal decisions for states and local governments are also included. *Pol. 227 is Prerequisite to Pol. 228.*

Pol. 231 The Politics of Public Policy 4 hours

Examines selected models and approaches to the study of public policy. While providing an overview of the policy process, the focus of attention will be upon how public issues arise, how they are placed upon the public agenda, and how they are kept off that agenda. Selected case studies of public policy making will be analyzed.

Pol. 232 Public Policy Formulation 4 hours

Focuses on the development of proposed courses of action for dealing with public problems. Examines the sources of policy proposals, the criteria used by individuals in making choices and the mobilization of support for the policy choice. Special attention will be paid to the role of the policy analyst and the ethical dimensions of policy choice.

Pol. 243 International Politics 4 hours
Analysis of the factors involved in the decision-making process among nations, traditionally and in a global perspective. This analysis is applied to theoretical, historical, and current political situations.

Pol. 288 The American Political Novel 2 hours
(See History 288.)

Pol. 300 Public Administration 4 hours
An examination of the basic concerns of American public agencies, principally federal; problems of planning, organization, staffing and efficiency; problems of their proper place in the political arena; problems of relating democratic principles of administrative actions.

Pol. 311 Public Budgeting Process 4 hours

This course examines the process and politics of budgeting in the federal government, with some attention to state and local budgeting problems. The role of the President and the executive branch in budgeting, congressional processes for budget approval, and the implementation of the budget are studied in depth. Recent budgeting systems used in the federal government are included, as well as examination of the importance of budgeting to overall program and policy development in government. Students will critique an actual public budget as part of the course.

Pol. 320 Legislative Process 4 hours
The course deals with the role of Congress in federal policy-making. The constitutional powers of Congress are examined, but the primary emphasis is on the influences on Congress and its organization for decision-making. The importance of constituents, the executive branch, political parties, colleagues, congressional committees and the media are all included. Some attention is also given to state legislatures.

Pol. 321 Executive Leadership 4 hours
This course focuses on the roles of the President, governors, mayors and other political executives in the American political system. The constitutional powers, historical development, and current responsibilities and problems of the presidency are examined. The President's relations with Congress, the courts, the bureaucracy, the press and the public are also included. Similar issues are examined with respect to governors and local government executives, with emphasis on the variety of powers and approaches possible for state and local executives. Students will examine the career and contributions of one political executive as part of the course.



Pol. 322 Judicial Behavior 4 hours
The role of the courts in the political process and as policy-makers will be a focus of study. Various approaches to the understanding of the behavior of judges and legal system actors will be examined. The influence of values, social background factors, professional socialization, small group dynamics, role perceptions, interest group interaction and recruitment and selection processes on judicial and legal actor decision-making will be studied. The problems of the impact of and compliance with judicial decisions will be examined.

Pol. 325 Political Economy 4 hours
An examination of the links between the economy, polity and policy. A particular focus will be on the role of government in the allocation of goods, especially public goods. Basic socio-economic decision-making mechanisms will be critically analyzed, including the market, government, hierarchy and bargaining. A variety of political economic approaches will be examined including traditional economic, non-economic and Marxist approaches.

Pol. 328 Comparative Government 4 hours
Survey of the major approaches to the study of political systems, with attention to similarities and differences. Focuses on political parties, governmental institutions, ideologies, elites, interest groups, and political culture. The material involves specific case studies of representative countries in Western and Eastern Europe, the Soviet Union, Asia, Africa, Latin America, and the Middle East.

Pol. 331 Public Policy Implementation 4 hours
The analysis of the systemic, organizational and personal factors influencing the behavior of actors who have authority to carry out policy directives. In addition, the influence of intermediaries, administrative lobbies, issue networks, recipients-clients, the media and policy evaluators on the implementation of public policy will be studied. Legal, bureaucratic, and personal imperatives affecting the composition and interaction of actors in relation to specific policies will be examined.

Pol. 332 Public Policy Evaluation 4 hours
This course focuses on the ways in which public programs are evaluated. It examines who does evaluation and the types of evaluation methods that may be used. Students will critique and design policy evaluations as part of the course.

Pol. 339 Americal Political Parties and Interest Groups 4 hours
Study of major and minor political parties in the U.S. Attention is given to the history, structure, functions, tactics, and financing of political parties in a democratic system, as well as to the American electoral process; and a brief look at foreign party systems. The role of interest or pressure groups in a democratic pluralist society is also given major attention. *Pol. 225 or Hist. 201-202 are recommended for background in the field.*

Pol. 341 U.S. Foreign Policy 4 hours
Examination of the personalities, assumptions, and mechanics behind the making of U.S. foreign policy since World War II. The material provides a framework for analyzing and evaluating various interpretations of national security and subsequent international commitments. Reference is made to particular examples of foreign policies, such as the Truman Doctrine, Korea, Vietnam, and Sino-American and U.S.-Soviet relations. *Prerequisite: Pol. 225 or permission of the instructor.*

Pol. 357 History of Political Philosophy 4 hours
Survey of the major literature in the evolution of political philosophy from the classical period to Karl Marx, with an attempt to gain perspective on both the eastern and western traditions. A special effort is made to relate the principal concepts in political philosophy, such as justice, freedom, and equality, to contemporary politics.

Pol. 465 Constitutional Law 4 hours
Study of the judicial elaboration and interpretation of the U.S. Constitution. A case study approach to the historical development of American constitutional principles. *Pol. 225 or Hist. 201-202 are recommended for background in the field.* (May be taken for credit as History 465.)

Pol. 468 Revolution and Reaction in Modern History 4 hours
(See History 468.)

Pol. 470 Internship in Politics, Public Administration and Public Policy 2-8 hours
A faculty supervised off-campus learning experience for a student concentrating in politics with an academic dimension involving off-campus work and a substantive research project. A faculty member must approve the internship experience and the projected academic research work prior to the student's beginning the internship experience. Off-campus work will be jointly supervised by the faculty member and an approved off-campus mentor. The student will be evaluated by the faculty supervisor who may take into consideration an evaluation of the student's performance by the off-campus mentor. In all cases an internship project must be submitted for evaluation by the student in order to successfully complete the requirements for the internship.

Pol. 478 Research Methods in Political Science 4 hours
Consideration of the scope of political science through a survey of the prominent research in the field. Attention will be given to the "scientific" dimension of this work including reference to computer-assisted political analysis.

Pol. 487-488 Independent Study 2 or 4 hours each

Pol. 490 Senior Project 2-6 hours
Begins first semester of the senior year.

Psychology

Aims

To assist the student in gaining a basic knowledge of psychology as the science of human behavior; in developing social awareness and social adjustment through an understanding of the fundamental similarities and differences among people; to encourage both original and critical thinking; and to give background preparation for professions which deal with individual and group behavior.

Two Plans of Concentration

Two plans of concentration are offered – one leading to the Bachelor of Arts degree and the other to the Bachelor of Science degree.

The Bachelor of Arts plan is designed for the student who, while not wishing to pursue psychology in its professional scientific aspects, does wish to explore in some depth those areas of psychology that are applicable to his or her future life as an intellectually rounded and responsible citizen. The program is particularly relevant to individuals who are interested in working in the mental health professions or counseling either as paraprofessionals or in fields such as school psychology, rehabilitation, or guidance counseling. This program is not intended for those planning to enter regular graduate programs in psychology.

The Bachelor of Science plan is for those students who are interested in the scientific aspects of psychology – particularly for those who are considering graduate work in psychology. The department, in good conscience, will not be able to recommend to Ph.D. programs in psychology any student who has not completed the requirements of this plan.



Requirements for the Bachelor of Arts Degree

The Bachelor of Arts degree requires a minimum of 24 hours in the department (including Psychology 100, 103, 399, 415, and 477) plus a Senior Project.

Depending upon the direction of the student's interests, the department sees as particularly useful and relevant courses in sociology, social work, philosophy, child and adolescent development, biology, and the history of scientific thought. A number of upper-level courses assume the ability to use the word-processing facilities of the computer.

Requirements for the Bachelor of Science Degree

The Bachelor of Science degree requires a minimum of 30 hours in the department, including Psychology 100, 103, 311, 312, 399, 415, and 477, as well as a Senior Project. Six hours are also required in natural science. Two of these must either be in physiological psychology (Psychology 335) or in biology courses stressing animal biology, physiology, or genetics. The remaining four hours may be in similar biology courses, physics, or chemistry (including Chemistry 100).

Students planning on graduate school in psychology are also advised to take at least one course in calculus and to obtain some skills in computer programming. It should also be kept in mind that most graduate schools require Ph.D. candidates to show a reading knowledge of one or two foreign languages, usually French, German, or Spanish.

Psych. 100 General Psychology 4 hours
Introduction to the general field of psychology, including learning, motivation, sensation, perception, cognition, personality, abnormal behavior, testing, physiological psychology, and social psychology. *A full-semester course. During the academic year, the course is offered in two formats. There are three hours of lecture and two hours of lab each week, plus three hour exams and a final.*

Psych. 103 Quantitative Methods in Psychology 4 hours
An introduction to the basic problems and techniques of measurement in psychology and to basic statistical techniques used in psychological research. This course also includes an introduction to designs for research and experimentation. *Highly recommended for those planning to take upper-division courses in psychology and required of all psychology majors. Four lectures and one lab each week during the first half of the semester; two lectures and one lab each week in the second half of the semester.*

Psych. 186 Psychology of Consciousness 2 hours
Consideration of the nature of human consciousness, concentrating upon both normal consciousness and altered states of consciousness resulting from dreams, hypnosis, biofeedback, drugs, and meditation. Emphasis is given to recent explorations concerning two major modes of consciousness: the intellectual and the intuitive. *Full-semester course. Two one-hour meetings each week.*

Psych. 275 Student Development in Higher Education 2 hours
(See Education 275.)

Psych 287 Organizations and Human Behavior 4 hours
(See Econ. 287.)



Psych. 311 Experimental Psychology I 4 hours
Encourages the student to become conversant with the basic factual and theoretical content of experimental psychology at an intermediate level, and to engage in experimental work in the areas of sensation, perception, and cognitive processes. Some familiarity with computers is highly desirable. *Prerequisites: Psych. 100, 103. Full-semester course. Three lectures and one lab each week.*

Psych. 312 Experimental Psychology II 4 hours
Continuation of Psych. 311, covering the areas of learning, perceptual-motor skills, and motivation. *Prerequisites: Psych. 100, 103. Full-semester course. Three lectures and one lab each week.*



Psych. 325 Abnormal Psychology 4 hours

The development, dynamics, social significance, and theoretical implications of deviant behavior. While the traditional psychiatric diagnostic categories are studied, there is a strong emphasis upon alternative approaches in the medical model of abnormality. The concepts of normality and abnormality in relation to cultural norms and stereotypes are examined in depth. The course should prove particularly useful to students planning on a career in the helping professions. *Full-semester course. Four lectures each week.*

Psych. 326 Experimental Social Psychology 4 hours

Aspects of social behavior and specific social issues are examined within the context of theory and experimental research. Topics include social factors in the development of morals; cooperation and competition; aggression; racial and social-class differences in personality, motivation, and language; attitudes and attitude change; authoritarianism and obedience; interpersonal and group processes (affiliation, attraction, perception, conformity, and leadership); and discussion of drug and sex issues. *Full-semester course. Four lectures each week.*

Psych. 327 Seminar in Theories and Techniques of Psychotherapy and Counseling 4 hours

Provides the student with a basic knowledge of the varied theories and techniques used in professional psychotherapy and counseling. Both academic and experiential learning are included, which should be particularly useful to students interested in going on into one of the helping professions such as clinical psychology, psychiatry, social work, school psychology, counseling, or occupational therapy. *Prerequisites: Psych. 100 and 324 or 325 plus permission of the instructor.*

Psych. 328 Human Sexuality 2 hours

Examination of the various psychological, biological, social, comparative, legal, and ethical aspects of human sexuality. In addition to sexual anatomy, physiology, birth control, and venereal disease, the course takes up current issues such as a sex-role development, sex reassignment, and sex therapy. (May be taken for credit as Education 328.)

Psych. 335 Biological Bases of Behavior 2 hours

Examines the neural and biochemical substrates of the more important aspects of animal and human behavior. *Prerequisite: Psych. 100. Half-semester course. Three hours of lecture and one lab each week.*

Psych. 399 Junior Preparation 4 hours

This course is designed to help students round out their background in the content and methods of psychology in preparation for their senior year. An intensive review of the various fields of psychology is undertaken and methods of field research and program evaluation strategies are studied. *Some familiarity with computers is highly desirable. A full-semester course meeting three hours per week.*

Psych. 410 Tests and Measurements 2 hours

(See Sp. Ed. 410.)

Psych. 415 Systematic Psychology 4 hours

Examination of the systematic positions and theories that have been important in the history of psychology, as well as a brief review of the philosophical bases underlying these positions. *Full-semester course. Four lectures each week.*

Psych. 477 Senior Seminar 2 hours

An introduction to professional opportunities in psychology and related fields and an exploration of value and ethical consideration. Continued guidance on senior project and senior comprehensive examinations also will be provided during the course.

Psych. 480 Methods and Materials in Teaching Psychology 4 hours

Study of the methods and materials used in teaching psychology in the secondary school. The course has a systematic and experimental emphasis. *Prerequisite: 16 hours of psychology.* (May be taken for credit as Education 480.)

Psych. 487-488 Independent Study 2 or 4 hours each

Psych. 490 Senior Project 2-8 hours

Psych. 315 Modification of Behavior 2 hours

The course has two main aims: to help the student learn systematically to analyze behavior in terms of reinforcement principles as developed by Skinner, Wolpe and others, and to help the student develop skills in the application of these principles to the modification of behavior in practical situations. Examples of the latter arise in the areas of behavior disorder, child-rearing, the work situation, and habit change. *A full-semester course.*

Psych. 324 Personality and Adjustment 4 hours

Covers major theories of personality and principles of personal adjustment and growth, including development, motivation, dynamics, problems in group living, and intellectual, emotional, and social adjustment. The course should be valuable to the potential doctor, nurse, social worker, child-care worker, teacher or parent. *Full-semester course. Three lectures and one lab each week.*

Religious Studies

Aims

The department desires to continue the historic interest of the College in the intellectual, spiritual, and social development of the community. Students are encouraged to join in the exploration of thought and research in the field of religious studies. Biblical studies form the central core of departmental offerings. In addition, each student also examines the relationship between religion and culture (both ancient and modern). The personal integration of knowledge and faith for an understanding and appreciation of value systems is a conscious goal of the department.

The department's aims are future-oriented. Rather than teaching a particular point of view, the department seeks to assist the student in learning how to acquire, evaluate, and use religious knowledge. Each course is consciously designed to enhance the student's efforts to interrelate his or her varied academic, social, and personal experiences.

Requirements for Field of Concentration

A minimum of 28 hours (excluding Religious Studies 100) in the department, a Senior Project, and the successful completion of the Senior Comprehensive Examination constitute the stated requirements of the department. Related requirements are Interdisciplinary Studies 251, 252.



The Comprehensive Examination in Religious Studies emphasizes Biblical studies, comparative religions, and contemporary religious thought and culture. All students completing a successful Religious Studies major will be expected to complete R.S. 300 and four additional hours of advanced Old Testament study, R.S. 311 and four additional hours of advanced New Testament study, four hours in world religions (R.S. 341, or 342, or 352), four hours in contemporary religious thought (R.S. 336, or Phil. 325 or Phil. 355) and four hours of religion and society (chosen from R.S. 360, or R.S. 383, or Soc. 356, or Phil. 124).

Students electing the field of religious studies are strongly urged to develop a proficiency in one or more foreign languages, to formulate a related field of concentration and to consider spending at least one semester in study abroad.

R.S. 100 Judaeo-Christian Heritage and Contemporary Living 4 hours
Study of the Judaeo-Christian heritage with the aim of understanding how Biblical writers reflect on the basic human and social issues which continue to engage contemporary people. Study is done within a triple context: (1) the Biblical tradition; (2) the liberal arts tradition of Bethany College; and (3) contemporary questions.

R.S. 300 Old Testament Literature and Thought 4 hours
Study of the development of Israelite religion and its institutions, the history of the various types of Old Testament literature, and the thought and theological motifs of Old Testament writers. Students will be assisted in acquiring a developmental understanding of Old Testament religion and an appreciation of its continuing value. *Prerequisite: R.S. 100 helpful, but not required.*

R.S. 302 Wisdom Literature 2 hours
Critical and appreciative reading of the literature of the Old Testament wisdom school (Proverbs, Job, and Ecclesiastes). Students are assisted to understand the ways in which the wisdom school sought to understand human meaning and destiny.

R.S. 304 Mission and Message of the Prophets 2 hours
Critical and appreciative reading of selected writings of the classical prophets of ancient Israel (Amos, Hosea, Isaiah, Jeremiah, and Ezekiel). Students are assisted to understand the major ideas of the prophets and the relationship of these ideas to the issues facing both ancient and modern people.

R.S. 310 New Testament Literature and Thought 4 hours
Study of the development of earliest Christianity (A.D. 30-125) and its institutions, the history of various types of New Testament literature, and the thought and motifs of various New Testament writers. Students will be assisted in acquiring a developmental understanding of the New Testament and an appreciation of its continuing value. *Prerequisite: R.S. 100 helpful, but not required.*

R.S. 311 Studies in the Gospels 4 hours
Students are assisted in developing the means to discern the message of the different gospel writers. While concentrating on the Gospel of Mark, the course equips the student to do basic study in any of the Gospels. *Prerequisites: R.S. 100 and permission of the instructor.*

R.S. 312 The Pauline School 4 hours
Students are assisted in developing an understanding of the Apostle Paul as a man, his thought, his place in early Christianity, the thoughts of his disciples and his opponents. *Prerequisites: R.S. 100 and permission of the instructor.*

R.S. 313 Apocalypticism 4 hours
Students are assisted in developing a facility to understand the messages of Daniel, the Revelation of St. John and other apocalyptic materials, to explore the history of apocalyptic imagery and literary relationships, and to discover the backgrounds and causes of the rise of the apocalyptic movement.

R.S. 314 The Gospel of John 2 hours
The student will study the Fourth Gospel as an important document in the history of religions, as a special literary form and composite, as a witness to the historical Jesus, and as a continuing witness to faith and to the meaning of human existence.

R.S. 322 Sociology of Religion 2 hours
(See Sociology 356.)

R.S. 336 20th Century Protestant Thought 4 hours
Students read and discuss the work of leading 20th century Protestant thinkers such as Paul Tillich, Karl Barth, Dietrich Bonhoeffer, and the Niebuhrs.

R.S. 341 The Religions of India 4 hours
Students explore the chief features of Indian religion. The course begins with an examination of Hinduism and includes a survey of the origins of Buddhism and a study of Indian Islam and Sikhism.

R.S. 342 The Religions of China 4 hours
Students explore the chief features of Chinese religion. The course begins with a consideration of the most ancient features of Chinese religion, continues with a study of the historical development of Confucianism, Taoism, and Chinese Buddhism and concludes with an analysis of the influence of religion on Chinese society.

R.S. 351 Ancient Near Eastern Civilization 4 hours
This course introduces the students to the historical development of life, culture, and religions of Mesopotamia, Egypt, and the Syro-Phoenician coast, including international relations from pre-history to Alexander the Great. (May be taken for credit as History 351.)

R.S. 352 Islamic Civilization 4 hours
Study of the life and background of the prophet, the *Qur'an*, the development of Islamic thought, and the early Islamic empires.

R.S. 353 Hellenistic Civilization 4 hours
Development of an acquaintance with the Graeco-Roman Oriental world based on a survey of social and cultural developments from Alexander the Great to Julius Caesar. (May be taken for credit as History 353.)

R.S. 361 American Catholicism 2 hours
A descriptive study of contemporary American Catholicism and its roots. The course emphasizes such topics as: modern Catholic worship, the crisis of authority, the "immigrant church," the church and political life, Catholic education, and the charismatic movement.



R.S. 362 American Judaism 2 hours
A descriptive study of contemporary American Judaism and its roots. The course emphasizes the life-cycle customs of Judaism. Jewish holidays are studied in the context of Jewish history. The course seeks to develop a broader understanding of the modern Jewish community in the United States and is supported by a grant from the Jewish Chautauqua Society.

R.S. 363 Alexander Campbell and His Reformation 4 hours
Students will study the backgrounds, life, thought and historical contexts and outcomes of Alexander Campbell, his colleagues and successors. Lectures, debates, multi-media materials and field work will be included. Special emphasis will be placed on primary sources and each student will complete a satisfactory primary research project.

R.S. 370 Renaissance and Reformation History 4 hours
The course will trace briefly the development of the Renaissance and will concentrate on the chief reformers of the sixteenth century – Zwingli, Luther, and Calvin.

R.S. 373 History of Early Christianity 4 hours
Introduction to the origins and expansion of Christianity from the period of Augustus Caesar to Constantine. The problems of institutions, consolidation, varieties, divisions, and unification will be explored in historical context.

R.S. 374 History of Eastern Christianity 4 hours
A study of the development of the Eastern Roman Empire and Byzantine Christianity from Constantine to the fall of Constantinople. Special attention will be given to the Eastern Fathers in both the Greek and Semitic developments of the church.

R.S. 376 History of Medieval Christianity 4 hours

Examination of the major developments within European Latin Christianity between the sixth and fourteenth centuries. Topics covered include: the conversion of Europe; relationships between church and state; contacts and conflicts with Byzantine Christianity and Islam; monasticism; the development of theology and Christian culture; reform, dissent, heresy and schism.

R.S. 380 Ethics and Society 4 hours
Studies in contemporary social-ethical and public policy issues from the perspective of classical and modern Judaeo-Christian thinking. Topics such as political and economic justice, war and peace, revolutionary movements, and environmental policy will be included. *No prerequisites, although completion of R.S. 100 is desirable.*

R.S. 381 Church Leadership Practice 2 hours
Development of an understanding of the theory and practice of public worship, preaching, and church program planning.

R.S. 382 Cultural Life in the Middle East and North Africa 4 hours
(See History 382.)

R.S. 383 Introduction to Bioethics 4 hours
Consideration of the religious and ethical dimensions involved in human decisions concerning abortion, artificial birth control, genetic planning, euthanasia, organ transplants, medical experiments on human subjects, and various forms of behavior modification.

R.S. 487-488 Independent Study 2 or 4 hours each

R.S. 490 Senior Project 2 to 8 hours

Science Applications (Honors)

Aims

The Honors Program in Science Applications prepares students in the current theoretical and applied knowledge, skills, and techniques of applied sciences and engineering design; provides an engineering and scientific foundation for applied research through integrated studies in the physical and life sciences, mathematics, and computer science; produces a graduate with science and engineering preparation for graduate schools and corporate, industrial, and government research career options; achieves a combined technical and liberal arts education serving future career advancement in technological leadership roles.

Requirements for Field of Concentration

Admission to this program is selective. All students in the program are required to complete a common base of 40 hours, including Chemistry 101-102, Physics 201-202, 222, Computer Science 201-202, Mathematics 201-202 and 341. In addition, all students will complete 8 hours of a common, upper-level, applied research and design component

consisting of an Internship, a Research and Applications course, and a Senior Project; these are, respectively, Science Applications 470 (2 hours), 475 (4 hours), and 490 (2 hours).

All students will also elect one of the following options: 1) For the degree in Science Applications, 24 hours of course work selected from the courses listed below, at least 12 of which must be chosen within a single area as listed. 2) For the degree in Chemistry, Mathematics, Computer Science, or Physics, 24 hours within the appropriate listing of courses for that field. (Biochemistry is part of the Science Applications degree program but is not a separate field of concentration.)

Chemistry 211-212, 226, 324, 326, 402, 414.

Mathematics 203, 344, 354, 383-384, 390, 401.

Computer Science 280, 290, 330, 370, 380, 390; **Mathematics** 354.

Physics 251, 261, 300, 303, 305-306, 314, 316, 318.

Biochemistry: Biology 210, 290, 343, 425, 467; Chemistry 211-212, 314.

It is recommended that students in the program also complete a Professional Core in Management, Public Affairs, or Communication.

S.A. 470 Internship in Science Applications 2 hours

A faculty supervised, off-campus industrial work experience, co-sponsored and coordinated with a participating industry. *Prerequisites: Junior standing and approval of the Director of the Honors Program in Science Applications.*

S.A. 475 Research and Applications 4 hours

Intensive exploration of research and design techniques with specific applications in the student's individual area of specialization. *This course is to be coordinated with the Internship and Senior Project.* *Prerequisites: Senior standing and approval of the Director.*

S.A. 487-488 Independent Study 2 or 4 hours each

S.A. 490 Senior Project 2-8 hours

Social Sciences

Social Sciences is a grouping of courses only. It is not a separate department. Students who participate in such programs as the American University Washington Semester and other similar off-campus programs may receive credit in this area.

Students majoring in History, Politics and Public Policy, Economics or Sociology who wish to be recommended for state certification in Social Studies must complete the following courses: History 100, 201, 202, 225; Soc. 100 or 220; Eco. 200; G.S. 202 or Soc. Sci. 302; Pol. 225, as well as 24 hours in their major field. See the Education Department listings for required Professional Education courses.

Soc. Sci. 302 World Geography 2 hours
Study of the physical, social, and political geographic factors of the world. Recent changes in Europe, Asia, and Africa are discussed.

Soc. Sci. 320 Cultural Backgrounds of British Literature 4 hours
Survey of British history from the Celtic times to the present. Major political developments such as the development of parliamentary government and the constitution are taken into account, but major emphasis is placed on extra-political matters such as the development of the English language, music, art, architecture, drama, the English church, education, and domestic life. Every effort is made to take advantage of the locale to visit museums, castles, cathedrals, universities, Parliament, theatres, and concert halls. Taught in Oxford, England.

Soc. Sci. 480 Methods and Materials in Teaching Social Studies 2 hours
Nature, objectives, and curricula of social studies in junior and senior high schools. Concepts and methods of approach are emphasized. Methods, techniques, teaching aids, resource units, lesson plans, evaluation, and teaching reading and study skills. (May be taken for credit as Education 480.)

Sociology and Social Work

Aims

To acquaint students with basic theories, research techniques, and applied practices in sociology, social work, and anthropology, and to prepare students for graduate study in these disciplines, or to enter professions in community service and other fields which require a knowledge of social relations.

Requirements for Field of Concentration in Sociology

A minimum of 36 hours in Sociology, including Sociology 100, 200, 209, and 477, plus a Senior Project. Related requirements are Mathematics 281 or Psychology 103; Interdisciplinary Studies 251 or 252, the other being strongly recommended. Sociology 100 or 220 is a prerequisite to Sociology 200, 309, 320, 329, 330, 353, 361, 362, 470, and 477.



Soc. 100 Introduction to Sociology

4 hours

Introduction to basic concepts and perspectives of the study of society. Includes analysis of principal institutions and social processes.

Soc. 105 Computers and Society 2 hours
(See Computer Science 100)**Soc. 200 Sociological Theory** 4 hours

Examination of social thought with primary emphasis upon the principal theorists from the 19th century to the present.

Soc. 205 Social Problems 4 hours

Though emphasis and illustrations will vary as the scene changes, the course is built on the analysis of fundamental and continuing problems and dilemmas, such as crime and delinquency, racial and ethnic relationships, health care and maintenance, employment, housing, poverty, and environmental issues.

Soc. 209 Research Methods 4 hours

The student is guided through the formal process of designing an empirical project. Emphasis is placed upon systematically reviewing relevant literature and justifying decisions concerning techniques to be used. Includes hypothesis formation and testing, methods of data collection and analysis, and problems of sampling. *Prerequisite: Math 281.*

Soc. 210 Race and Minority Concerns

2 hours

A survey of racial, cultural, ethnic, age and sexual diversity with emphasis on the effects of prejudice and discrimination on minorities.

Soc. 220 Cultural Anthropology 4 hours

Examination of cultural variability, especially in terms of its influence on human behavior. Comparative analysis of cultural systems with an emphasis on contemporary non-Western societies.

Soc. 300 Social Movements 2 hours

Examination of the origins and development of religious, political, agrarian, and labor movements. Both historical and contemporary examples of revolutionary and reform movements will be analyzed.

Soc. 302 Schools and Society 4 hours
(See Education 302)**Soc. 309 Formal Organization**

4 hours

Analysis of commercial, industrial and public organizations and bureaucracies. Morale, subgroup conflict and cooperation, and the impact of social environment or organizational structure.

Soc. 329 Population Study 2 hours

An introduction to demography. Theories and methods of studies concerning population size and composition. Trends of population change in the world and in the United States.

Soc. 351 The Family 4 hours

Examination of the structure and function of the family as a basic unit of social organization. Changing nature of marriage and the family in American society.

Soc. 353 Social Stratification 2 hours

Study of forms of social stratification and differentiation. Class, prestige and power as the bases of stratification. Theories of the cause of social stratification and social mobility.

Soc. 356 Sociology of Religion

4 hours

Formal religion and its functional equivalents both in primitive and modern societies. The relationship between religion and other social institutions. Religion and social change. (May be taken for credit as Religious Studies 322.)

Soc. 361 Deviance and Social Control

4 hours

Sociological perspectives focusing on problems of deviance such as crime, mental illness, and sexual deviation. Institutions of correction and rehabilitation are examined.

Soc. 362 Socialization 2 hours

Study of socialization as a process whereby the individual becomes a functioning member of a group. Processes of resocialization.

Soc. 470 Field Work 2-8 hours

Available to students who are sufficiently advanced in their theoretical and methodological studies to undertake investigation of a practical or theoretical problem in a field setting. *Prerequisite: Permission of Department.*

Soc. 477 Senior Seminar 4 hours

Consideration of conceptual and research problems in a seminar setting. Includes preparation for comprehensive examinations and senior projects.

Soc. 487-488 Independent Study

2 or 4 hours each

Studies may be planned as extensions of, or separate from, existing Department offerings.

Soc. 490 Senior Project 2-8 hours

For students approaching completion of their majors. Designed to help students evaluate their activities in sociology and to integrate their educational experiences.

Requirements for a Degree in Social Work

The goal of the social work program is to prepare the student for beginning social work practice. Students will accomplish this goal by completing 38 hours of social work courses to include: S.W. 120, S.W. 201, S.W. 202, S.W. 220, S.W. 230, S.W. 240, S.W. 310, S.W. 350, S.W. 352, S.W. 470, and S.W. 477. In addition, students must complete Bio. 100, Soc. 205, Soc. 209, Soc. 210, Psych. 100, Psych. 326, Pol. 227, and completion of a Senior Project in Social Work. Social Work 120 or 240 or permission of the department head is a prerequisite to all courses in Social Work, except Social Work 125-150, 230 and 310.

Within the Social Work curriculum students will be able to pursue a variety of concentrations to include child welfare, aging, public welfare, health care, corrections, mental health, school social work, and church community relations.

Students electing the field of study in Social Work are expected to take a course in human anatomy and physiology and to select Perspectives courses to include: Economics 200, Education 201 and 202, Sociology 100, Psychology 315, 324 and 325.

The Social Work program is accredited by the Council on Social Work Education.

S.W. 120 Introduction to Social Welfare and Social Work 2 hours

An examination of the origin and development of social welfare as an institution in the United States. Examination of the role of the social worker, and the place of the profession in society.

S.W. 125-150 Special Topics in Social Work 2 or 4 hours each

Seminars in this category take up special topics of mutual concern to faculty and students.

S.W. 125 Child Welfare Services 2 hours

This course is a comprehensive study of the principal child welfare services. It begins by defining child welfare, placing it as a field of practice within social work, and presents a scheme for the categorization of child welfare problems in terms of role theory. It provides a historical perspective on how and why welfare services developed to describe the current socioeconomic context in which they operate. Topics covered include adoption, child abuse and neglect, day care, foster care and other child caring institutions.

S.W. 130 Alcohol Use & Abuse 2 hours

Designed to provide alcohol education to those interested in better understanding the effects of alcohol on individuals, families, and the community at large. Topics for study include: the use and misuse of alcohol throughout history, effects of alcohol on the human body, personal and societal costs of drinking, etiology of alcoholism, and considerations for special populations.

S.W. 135 Working With the Aged 2 hours

This course is a study of the biological, psychological, social, economic, cultural and spiritual factors of the aged in society. The course will provide an overview for persons in the helping professions who want to work with older people individually or with members of families, groups or organizations. Research efforts will be presented that illuminate our present knowledge about various aspects of aging and about the heterogeneous elderly population in the United States.

S.W. 140 Peer Counseling 2 hours

An introduction to basic listening and communication skills using an applied crisis intervention model and a practice and experiential exercise orientation. The focus of the course is the development of listening skills applicable to a variety of helping situations. Focuses on skills (listening and problem-solving), strategy (crisis intervention model), and self (the student as helper). Topics will include: the nature of crisis, continuing and following responses, feedback, nonverbal communications, specific college student issues and referral skills.

S.W. 201 Human Development I 4 hours

(See Education 201.)

S.W. 202 Human Development II 4 hours

(See Education 202.)

S.W. 220 Social Welfare Policies and Services 4 hours

Examines the social, political and economic context of social welfare policies and programs. Analysis of specific policy issues and their implications for professional social work practice.

S.W. 230 Social Welfare Institutions 2 hours

Critical examination of organized societal response to social welfare need. Conducts a conceptual analysis of the scope and intent of social welfare programs, clarifying the concept of social welfare and showing how welfare intent is carried into constructive social action.

S.W. 240 Introduction to Social Work Practice 2 hours

An introduction to basic dynamics necessary to engage clients in the social work process. Beginning listening, interviewing, and recording skills will be emphasized.

S.W. 310 Human Behavior and the Social Environment 4 hours

Focuses on the person as an individual with the continuing potential for growth and change. The maturational process of the individual will be followed with emphasis being given to interaction with the social environment, coping abilities and capacity for change. The bio-psycho-socio-cultural determinants of behavior are studied integrating knowledge of the person-in-his/her situation.



S.W. 350 Social Work Practice and Methods I 4 hours

Basic theories and concepts undergirding skills for professional social work practice. Study focuses on professional values, social work roles, and social work client relationships. Skills in interviewing, data collection and case recording are explored and practiced.

S.W. 352 Social Work Practice and Methods II 4 hours

In-depth and advanced examination of the social work process. Problem solving and intervention strategies are studied in relation to prevention, maintenance, and rehabilitation. The skill of social work practice is explored in the context of current programs and practice methods.

S.W. 470 Field Placement 12 hours

An educationally directed internship experience in a social welfare agency or program as a social work practitioner. The field experience will involve five full days a week agency experience during the fall semester of the senior year of study. The placement is designed to test and increase student practice skills with the goal of self direction and the appropriate use of supervision and consultation within the social work practice setting.

S.W. 477 Field Practice Seminar 4 hours

Provides advanced professional knowledge which examines problems and issues of social work practice. The transitional role of the student moving from an undergraduate academic setting to the world of work and/or graduate study will be explored. Need for specific content not previously available to the student is arranged.

S.W. 487-488 Independent Study

2 or 4 hours each

Studies may be planned as extensions of, or separate from existing Social Work offerings.

S.W. 490 Senior Project 2-8 hours

Study will be directed in a specialized concentration of social work practice. Designed to allow the student to integrate both the field placement and academic experience.



The Directories

BOARD OF TRUSTEES

Officers of the Board

CHARLES D. BELL, *Chairman*

TODD H. BULLARD, *President*

ROBERT A. LAYTON, *Treasurer and Chief Business Officer*

JAMES F. COMPANION, *Secretary*

ANN W. TROMBADORE, *Assistant Secretary*

Term Expires June 1987

MARSHALL L. BERKMAN, AMPCO-Pittsburgh Corporation, 700 Porter Building, Pittsburgh, Pennsylvania

EDWIN V. CLARKE, JR., Westinghouse Electric Corporation, Gateway Center, Pittsburgh, Pennsylvania

JAMES L. COLLINS, 2 Willow Springs Road, Wheeling, West Virginia

JAMES F. COMPANION, Schrader, Stamp, Byrd, Byrum & Companion, 1000 Hawley Building, Wheeling, West Virginia

MICHAEL J. KASARDA, R.D. 4, Box 65140, Bellaire, Ohio

HARRY MARTENS, Commercial Union Insurance Companies, One Beacon Street, Boston, Massachusetts

EUGENE MILLER, USG Corporation, 101 South Wacker Drive, Chicago, Illinois

G. OGDEN NUTTING, The Ogden Newspapers, Inc., 1500 Main Street, Wheeling, West Virginia

HAROLD R. WATKINS, Board of Church Extension of the Christian Church (Disciples of Christ), 110 South Downey Avenue, Indianapolis, Indiana

FRANK L. WIEGAND, JR., 855 Academy Place, Pittsburgh, Pennsylvania

Term Expires 1988

ALTON W. BEHM, M.D., 112 South Street,
Chardon, Ohio

COURTNEY BURTON, Oglebay-Norton
Company, 1100 Superior Avenue, Cleveland,
Ohio

WILLIAM R. HOAG, West Elizabeth Lumber
Company, 1 Chicago Avenue, Elizabeth,
Pennsylvania

RODNEY B. HURL, M.D., 211 Stocksdale
Drive, Marysville, Ohio

THOMAS P. JOHNSON, 1500 Oliver
Building, Pittsburgh, Pennsylvania

WILLIAM L. MILLER, JR., The Christian
Church (Disciples of Christ) in the Upper
Midwest, 3300 University Avenue,
Des Moines, Iowa

WILLIAM F. PORTER, 946 Park Boulevard,
East Liverpool, Ohio

JOHN G. REDLINE, JR., State Capitol,
Building 6, Room 553, Charleston,
West Virginia

Term Expires 1989

CHARLES D. BELL, 67 Seventh Street,
Wellsburg, West Virginia

ROBERT F. CORY, 420 Blackhawk Road,
Beaver Falls, Pennsylvania

WILLIAM E. LEWELLEN, U.S. Steel
Corporation, U.S. Steel Building, Pittsburgh,
Pennsylvania

ROBERT MACKENZIE, JR., 5 Duck Hook
Circle, River Hills Plantation, Clover,
South Carolina

ANN C. PRESTON, 1324-D Pelican Creek
Crossing, St. Petersburg, Florida

JOHN W. RENNER, 29942 Bolingbrook
Road, Pepper Pike, Cleveland, Ohio

WILLIAM S. RYAN, Edmondson Avenue at
Academy Road, Baltimore, Maryland

ANN W. TROMBADORE, 626 Watchung
Road, Bound Brook, New Jersey

ROBERT C. WETENHALL, McConnell,
Wetenhall & Co., Inc., 1350 Avenue of the
Americas, Suite 1102, New York, New York

Faculty Representative to the Board

DAVID J. JUDY, Bethany, West Virginia

Honorary Trustees

A. DALE FIER, 236 Inlet Way, Palm Beach
Shores, Florida

PERRY E. GRESHAM, Highland Hearth,
Bethany, West Virginia

PAUL A. NORTON, 20 Church Street, A-30,
Greenwich, Connecticut

CHARLES E. PALMER, 150 Royal Oak
Drive, Apt. 605, McKeesport, Pennsylvania

MALCOLM W. RUSH, 3096 Orchard Road,
Cuyahoga Falls, Ohio

JOSEPHINE SHEETS WICKERHAM,
7150 Estero Boulevard, Ft. Myers, Florida

Committees of the Board of Trustees

(The President of the College is an *ex officio*
member of all committees.)

EXECUTIVE (Elected)

Michael J. Kasarda, Chairman; Charles D.
Bell, William R. Hoag, Rodney B. Hurl,
Thomas P. Johnson, Harry Martens, William F.
Porter, Ann C. Preston, John W. Renner,
Harold R. Watkins

FISCAL AFFAIRS (Elected by Executive Committee)

William F. Porter, Chairman; Edwin V. Clarke,
Jr., Robert F. Cory, Michael J. Kasarda,
Eugene Miller, (Charles D. Bell, Robert A.
Layton, *ex officio*)

INVESTMENT (Elected)

Frank L. Wiegand, Jr., Chairman; William R.
Hoag, Thomas P. Johnson, William E.
Lewellen, Harold R. Watkins, (Charles D. Bell,
Robert A. Layton, *ex officio*)

CAMPUS PLANNING

James L. Collins, Chairman; Alton W. Behm,
Marshall L. Berkman, James F. Companion,
William R. Hoag, Robert Mackenzie, Jr.

CHURCH RELATIONS

William L. Miller, Jr., Chairman; Ann C.
Preston, William S. Ryan, Harold R. Watkins

DEVELOPMENT

Rodney B. Hurl, Chairman; Courtney Burton,
James L. Collins, Robert F. Cory, William R.
Hoag, Robert C. Wetenhall, Frank L.
Wiegand, Jr.

LONG-RANGE PLANNING

James L. Collins, Chairman; Rodney B. Hurl,
William E. Lewellen, William L. Miller, Jr.,
Ann W. Trombadore

NOMINATION

William F. Porter, Chairman; Alton W. Behm,
Charles D. Bell, Rodney B. Hurl, Michael J.
Kasarda, Ann C. Preston

COLLEGE COMMUNITY

John W. Renner, Chairman; Alton W. Behm,
Marshall L. Berkman, Edwin V. Clarke, Jr.,
James F. Companion, Robert F. Cory, Rodney
B. Hurl, Robert Mackenzie, Jr., Ann C.
Preston

ALUMNI COUNCIL MEMBERS 1986-1987

GWENDOLYN DAVIS ALLEN, Bethany,
West Virginia

SALLY SCHREIVER BADO, Pittsburgh,
Pennsylvania

TRUDY LYNN BERKEY, New Martinsville,
West Virginia

JUNE MONTGOMERY BOOHER,
Wellsburg, West Virginia

FRANCES FIESS CALDWELL,
New Martinsville, West Virginia

CARYN TEUTSCH CHERNICKY,
Bethel Park, Pennsylvania

STEPHEN K. CHERNICKY,
Bethel Park, Pennsylvania

TERRY A. CRAIG, *Vice President*,
Canonsburg, Pennsylvania

WILBUR H. CRAMBLET, JR., Bethany,
West Virginia

JOHN ERSKINE, Pittsburgh,
Pennsylvania

JUDITH A. FLYNN, Pittsburgh,
Pennsylvania

DONALD R. FORD, Warren, Ohio

SCARLETT LEE FOSTER, Charleston,
West Virginia

BARRY F. GAETANO, Greensburg,
Pennsylvania

BENJAMIN H. GRIFFIN, Bethel Park,
Pennsylvania

WILLIAM RAY KIEFER, Weirton,
West Virginia

DIANA PRELI LAMMERT, Pittsburgh,
Pennsylvania

J. HARRY LAMMERT, JR., Pittsburgh,
Pennsylvania

DALE LAUGHNER, Beaver Falls,
Pennsylvania

S. DEAN LESIAK, Bay Village, Ohio

ROBERT LEE MARTIN, Wheeling,
West Virginia

JOSEPH W. MAYERNICK, *President*,
Weirton, West Virginia

RICHARD MEESS, Pittsburgh,
Pennsylvania

JAMES P. O'ROARK, Beaver Falls,
Pennsylvania

NANCY TOMASEK RATCLIFFE,
Wheeling, West Virginia

LAURA CRAMBLET SLACUM, McDonald,
Pennsylvania

L. JAY SMITH, Orchard Lake, Michigan

JOHN R. TAYLOR, Bethany, West Virginia

KENNETH W. VALUSKA, Hudson, Ohio

DAVID R. WILLIAMS, Annandale, Virginia

TRUSTEE MEMBERS, EX-OFFICIO

ROBERT F. CORY, Beaver Falls,
Pennsylvania

RODNEY B. HURL, M.D., Marysville, Ohio

ADMINISTRATION

TODD H. BULLARD, **President**

ROBERT A. SANDERCOX, **Vice President
and Provost for College Advancement**

THOMAS H. STEIN, *Director of Admission*

JERALD E. FUQUA, *Director of Church
Relations*

RUTH L. WESTLAKE, *Director of Public
Information and Publications*

JOHN W. WHITE, *Associate Director of
Admission*

SHERYL L. GREENLEE, *Admission
Counselor*

SUSAN E. LEMLEY, *Admission Counselor*

KATHLEEN J. FAULKENBERRY,
*Assistant to Director of Public Information
and Publications*

ROBERT C. NOLAN, **Vice President for
Development**

JAMES R. SPEEGLE, **Acting Dean of
the Faculty**

JOSEPH M. KUREY, *Assistant Dean for
Academic Administration*

JOHN C. GIESMANN, *Registrar*

RUTH MARTIN JONES, *Assistant to the
Registrar*

JONAS BARCIAUSKAS, *Head Librarian*

TONI P. OLSHAN, *Reference Librarian*

RUSSELL J. COOK, *Director of Video and
Media Services*

EDWIN GOLDIN, *Director of the
Center for Academic Computing*

PAULINE R. NELSON, *Coordinator of the
International Education Programs*

LARRY E. GRIMES, *Director of Liberal
Studies*

ANN C. SHELLY, *Director of Teacher
Preparation Programs*

WALLACE B. NEEL, *Acting Director of
Athletics*

ROBYN R. COLE, *Director of Writing and
Developmental Studies*

I. HOWARD SEILER, *Director of Special
Advising*

WILLIAM M. INGEMI, *Athletic Trainer*

JOHN S. CUNNINGHAM, **Executive Dean
for Student Affairs**

DARLINE B. NICHOLSON, *Dean of
Student Life and Director of Renner
Union*

CHRISTINE OSSMAN, *Assistant Dean of
Students and Coordinator of Freshman
Residence Halls*

THEODORE W. BUNNELL, *Director of
Financial Aid*

BETH DAMEIER, *Associate Director of
Financial Aid and Coordinator of
Financial Aid Services for Current Students*

ANNE ZALACCA, *Assistant Director of
Financial Aid and Admission*

JOANNE SYKES, R.N., *Supervisor of the
Infirmary*

JAMES COMERCI, *College Physician*

BASIL P. PAPADIMITRIOUS, M.D.,
College Physician

WILLIAM B. ALLEN, *College Chaplain*

FATHER LEWIS F. GAETANO, *Roman
Catholic Chaplain*

DANIEL M. LOWY, *Jewish Chaplain*

W. CARROLL THORN, *Episcopal Chaplain*

SAUL REYES, *Assistant Chaplain*

SHARON REYES, *Administrative Assistant
to the Dean of Student Services*

ROBERT LAYTON, **Treasurer and
Chief Business Officer**

JOSEPH M. KUREY, *Associate Business
Officer*

THOMAS A. FERRIS, *Director of Physical
Plant*

SHIRLEY M. JACOB, *Assistant Treasurer
and Accountant*

PATRICIA LOWE, *Administrative Assistant
Payroll/Benefits*

NANCY AULT, *Manager of the Leadership
Center*

ANN CRAFT, *Manager of College Store*

JUSTIN B.G. SKYWATCHER, *Director of
Data Processing*

RICHARD PIKE, *Director of Dining Service*

THE LEADERSHIP CENTER
**Office of Career and Professional
Development:**

JAMES R. SPEEGLE, *Executive Fellow of
The Leadership Center*

FRANCESCA GIORDANO, *Coordinator of
Counseling Services*

GWENDOLYN ALLEN, *Coordinator of
Placement Services and Campus
Employment*

Summer Programs

Leadership Center Programs

TODD H. BULLARD, *President of the College on the M.M. Cochran Foundation and Professor of Political Science*. (1980). Bethany College; B.A., West Liberty State College; M.A., West Virginia State College; M.A., West Virginia University; Ph.D., University of Pittsburgh.

JAMES R. SPEEGLE, *Acting Dean of the Faculty*. (1985).

A.B., M.A., University of Rochester; Ph.D., Syracuse University.

ROBERT A. SANDERCOX, *Vice President and Provost for College Advancement*. (1957). B.A., Bethany College; M.Div., Yale University; University of Buffalo; West Virginia University.

JOHN S. CUNNINGHAM, *Executive Dean for Student Affairs*. (1967).

B.S., Slippery Rock State College; M.Ed., Kent State University; Ed.D., West Virginia University.

Emeriti

FORREST H. KIRKPATRICK, *Dean of Students and Professor Emeritus* (1927-1952) and *Adjunct Professor of Economics and Business*. (1952-1958; 1970). University of Dijon; B.A., Bethany College; M.A., and Prof. Dipl., Columbia University; University of Pittsburgh; University of London; University of Pennsylvania; University of Cambridge; LL.D., Bethany College; LL.D., College of Steubenville; LL.D., Drury College; H.H.D., Wheeling College.

JOHN J. KNIGHT, *Professor of Physical Education Emeritus*. (1930-1970). B.A., West Virginia Wesleyan College; M.A., Ohio State University; University of Michigan.

BRADFORD TYE, *Associate Professor of Mathematics Emeritus*. (1943-1973). B.S., Alma White College; M.S., New York University; Rutgers University; Columbia University; University of Pittsburgh.

GEORGE K. HAUPTFUEHRER, *Professor of Music Emeritus*. (1945-1977). B.A., B.M., Friends University; M.A., University of Kansas; Pittsburgh Musical Institute; Juilliard School of Music; Indiana University.

S. ELIZABETH REED, *Associate Professor of Physical Education Emeritus*. (1945-1975). B.A., Muskingum College; M.Ed., University of Pittsburgh; University of Wisconsin; New York University; University of Wyoming; University of Southern California; University of Michigan

HELEN LOUISE MCGUFFIE, *Professor of English Emeritus*. (1947-1983).

B.A., Bethany College; M.A., University of Pittsburgh; Ph.D., Columbia University; Oxford University.

MARGARET MATHISON, *Professor of Education Emeritus*. (1951-1974).

B.A., M.Litt., University of Pittsburgh; University of Southern California; Pennsylvania State University; Ohio State University.

J. DANIEL DRAPER, *Professor of Chemistry Emeritus*. (1951-1984).

B.S., Franklin and Marshall College; Ph.D., University of Maryland; Michigan State University.

WINIFRED WEBSTER, *Dean of Women and Instructor in English Emeritus*. (1952-1960).

B.A., University of North Dakota; M.A., Columbia University.

PERRY E. GRESHAM, *President* (1953-1972) and *President Emeritus and Distinguished Professor*. (1972-).

B.A., B.D., Texas Christian University; LL.D., Texas Christian University; Litt.D., Culver-Stockton College; L.H.D., Chapman College; Ed.D., Transylvania University; University of Chicago; Columbia University; Litt.D., University of Cincinnati; Litt. D., Findlay College; Pd.D., Youngstown University; D.B.A., Lawrence Institute of Technology; H.H.D., Bethany College; J.D., William Woods College; Litt.D., West Virginia University; L.H.D., Concord College; Ed.D., Rio Grande College; LL.D., Alderson-Broadbush College; LL.D., Quincy College.

SUSAN W. HANNA, *Instructor in Health and Physical Education Emeritus*. (1957-1977).

B.A., Bethany College; Marjorie Webster School of Physical Education.

HSIOH-REN WEI, *Professor of Physics and Public Affairs Emeritus*. (1963-1972).

B.A., University of Nanking; Ph.D., University of Chicago.

THEODORE R. KIMPTON, *Assistant Professor of Foreign Languages Emeritus*. (1965-1974).

B.S., United States Military Academy; M.A., University of Maryland; Catholic University; Laval University.

WESLEY J. WAGNER, *Associate Professor of Art Emeritus*. (1967-1983). Pennsylvania Academy of Fine Arts; Barnes Foundation.

DOROTHY HUESTIS, *Assistant Professor of Education Emeritus*. (1969-1976).

B.A., M.A., Indiana University.

CHARLES E. HALT, *Professor of Economics Emeritus*. (1969-1977).

B.S., Slippery Rock State College; M.Ed., Pennsylvania State University; Ph.D., Syracuse University; University of Pittsburgh.

LEONORA BALLA CAYARD, *Professor of Foreign Languages Emeritus*. (1970-1986).

Ph.D., Marburg University; Yale University.

OLIVER MANNING, *Artist-in-Residence Emeritus*. (1972-1982).

B.M., Louisiana State College; M.M., Cincinnati College Conservatory of Music.

Professors

WILLIAM L. YOUNG, *Professor of History and Political Science and Head of the History Department*. (1950).

B.A., Bethany College; M.A., Ph.D., Ohio State University; Columbia University.

JOHN R. TAYLOR, *Professor of English*. (1955).

B.A., Bethany College; M.A., Princeton University; University of Akron; University of Kansas; University of Birmingham, England; University of Edinburgh; Oxford University.

JAMES W. CARTY, JR., *Professor of Communications*. (1959).
B.A., Culver-Stockton; B.D., University of Chicago; M.S., Northwestern University; D.D., Evangelical Seminary of Puerto Rico; University of Oklahoma; George Peabody College; Scaritt College; Saltillo (Mexico) State Teachers College; Diploma from National University of Nicaragua; Diploma from University of San Carlos; Ohio University; University of Denver; Universidad Iberoamericana.

RICHARD B. KENNEY, *T. W. Phillips Professor of Old Testament Literature and Head of the Department of Religious Studies*. (1964).

B.A., Washington University; B.D., M.A., Ph.D., Yale University; Basel University; McGill University; University of Tübingen; The University of Chicago.

ROBERT E. MYERS, *Professor of Philosophy and Head of the Department*. (1964).

B.A., Bethany College; M.Div., Texas Christian University; Ph.D., Ohio State University.

GARY E. LARSON, *Professor of Biology*. (1964).

B.S., M.S., New York State University, Albany; Ph.D., Rutgers University; Albany Medical College.

HIRAM J. LESTER, *Professor of Religious Studies*. (1965).

Johnson Bible College; B.A., B.D., Phillips University; M.A., Ph.D., Yale University.

JOHN U. DAVIS, *Professor of Education*. (1966).

B.A., Bethany College; M.A., Ed.D., Columbia University; University of Nebraska; Oxford University; West Virginia University.

DAVID J. JUDY, *Professor of English and Theatre and Head of the Fine and Applied Arts Department*. (1967).

B.A., Denison University; M.A., Western Reserve; Ph.D., West Virginia University; University of Mexico; Oxford University.

STANLEY L. BECKER, *Professor of Computer Science and Philosophy*. (1968).
B.S., New York State College of Forestry; Ph.D., University of Wisconsin.

J. TREVOR PEIRCE, *Professor of Psychology*. (1969).

B.A., Princeton University; Ph.D., University of California.

ALBERT R. BUCKELEW, JR., *Professor of Biology and Head of the Department*. (1969).
B.S., Fairleigh Dickinson University; Ph.D., University of New Hampshire.

LARRY E. GRIMES, *Professor of English, Head of the Department, and Director of Liberal Studies*. (1970).

B.A., Bethany College; B.D., Yale Divinity School; Ph.D. Emory University.

PAULINE R. NELSON, *Professor of Foreign Languages, Head of the Department, and Coordinator of International Education Programs*. (1971).

B.A., Upsala College; M.A., Ph.D., University of Pittsburgh.

MILTON R. SMITH, *Professor of Chemistry and Head of the Department*. (1972).

B.S., Sul Ross State University; Ph.D., Texas A. and M. University; The Ohio State University.

DAVID T. BROWN, *Professor of Mathematics and Computer Science*. (1974).

B.A., Ottawa University; M.A., Ph.D., Syracuse University; University of Pittsburgh.

T. GALE THOMPSON, *Professor of Psychology*. (1974).

B.A., M.A., Ph.D., University of Missouri.

LYNN ADKINS, *Professor of Sociology and Social Work and Head of the Department*. (1978).

A.B., Marshall University; M.S.W., West Virginia University; Ph.D., University of Pittsburgh; London School of Economics and Social Science.

ANN C. SHELLY, *Professor of Education, Head of the Department, and Director of Teacher Preparation Programs*. (1978).
B.A., M.A., Ph.D., Michigan State University.

EDWIN GOLDIN, *Professor of Physics, Head of the Department, and Director of Academic Computing*. (1981).
B.A., Temple University; M.S., Ph.D., Polytechnic Institute of New York.

HAROLD C. SHAVER, *Professor of Communications and Head of the Department*. (1982).

B.A., Muskingum College; M.A., Ph.D., Syracuse University.

ALBERT J. OSSMAN, JR., *Professor of Politics and Public Policy, Head of the Department, and Director of Public Affairs Programs*. (1982).

A.B., M.A., Ph.D., Syracuse University.

JAMES R. SPEEGLE, *Professor of Economics and Business and Head of the Department*. (1985).

A.B., M.A., University of Rochester; Ph.D., Syracuse University.

Associate Professors

JAMES E. ALLISON, *Associate Professor of Mathematics and Head of the Department*. (1964).

B.S., Bethany College; M.A., West Virginia University; Texas Christian University.

JOHN W. LOZIER, *Associate Professor of History*. (1964).

B.A., University of Colorado; M.A., Ph.D., Ohio State University; Massachusetts Institute of Technology.

JOHN D. DAVIS, *Associate Professor of Economics and Business*. (1965).

B.A., American International College; M.A., University of Connecticut; West Virginia University; The University of Chicago.

W. RANDOLPH COOEY, *Associate Professor of Economics and Business*. (1966).

B.A., Bethany College; M.A., West Virginia University; Mississippi State University.

ANTHONY L. MITCH, *Associate Professor of English*. (1967).

B.A., Cornell University; M.A., St. John's University; New York University.

WALTER L. KORNOWSKI, *Associate Professor of Art*. (1967).

B.F.A., Rochester Institute of Technology; M.S., State University College of Buffalo; M.F.A., West Virginia University.

JOHN H. HULL, *Associate Professor of Psychology and Head of the Department.* (1976).
B.S., Alma College; M.A., Ph.D., Kent State University.

MARC A. OLSHAN, *Associate Professor of Sociology and Social Work.* (1981).
B.S., Cornell University; M.A., Columbia University; Ph.D., Cornell University.

JACQUELINE DeLAAT, *Associate Professor of Political Science and Public Administration.* (1982).
B.A., The State University of Iowa; M.A., University of Minnesota; Ph.D., University of Pittsburgh.

JOE M. LESEM, *Associate Professor of Communications.* (1985).
B.S., Southeast Missouri State University; M.A.J., University of Missouri.

Assistant Professors

ROBYN R. COLE, *Assistant Professor of English and Director of Writing and Developmental Studies.* (1968).
B.A., University of Maryland; M.A., University of Georgia; Ohio University; West Virginia University.

JOHN J. McGOWAN, *Assistant Professor of Physical Education.* (1980).
B.S., Manhattan College; M.S., Springfield College.

HAROLD M. CURNUTTE, *Assistant Professor of Accounting.* (1981).
B.A., M.S., Ohio University.

I. HOWARD SEILER, *Assistant Professor of Education.* (1981).
B.A., M.A., Ph.D., Michigan State University.

WALLACE B. NEEL, *Assistant Professor of Physical Education.* (1982).
B.S., M.S., Ohio University.

MARY ELLEN KOMOROWSKI, *Assistant Professor of Mathematics and Education.* (1982).
B.A., M.A., Ed.D., West Virginia University; The American University of Beirut.

JAMES A. ZALACCA, *Assistant Professor of Physical Education.* (1982).
A.A.S., Genesee Community College; B.S., Brockport State University; M.A.T., DePauw University.

JAMES M. MEYER, *Assistant Professor of Physical Education.* (1982).
B.S., M.S., University of Akron.

RUSSELL J. COOK, *Assistant Professor of Communications and Director of Video and Media Services.* (1983).
B.F.A., M.A., Miami University.

ROBERT A. PAYSEN, *Assistant Professor of Chemistry.* (1983).
B.A., College of St. Thomas; Ph.D., University of Tennessee.

JONAS BARCIAUSKAS, *Head Librarian and Assistant Professor of Religious Studies.* (1984).
B.A., M.S.L.S., Columbia University; M.A., Pacific School of Religion; Ph.D., Fordham University.

KATHERINE S. CORAM, *Assistant Professor of Sociology and Social Work.* (1984).
B.A., Alderson-Broadbent College; M.S.W., West Virginia University.

MAJID A. SAWTARIE, *Assistant Professor of Physics and Computer Science.* (1985).
B.S., Lebanese University; M.S., M.S.C.S., Ph.D., Ohio University.

FUJIKO O. SAWTARIE, *Assistant Professor of Mathematics and Computer Science.* (1985).
B.S., Chubu Institute of Technology (Japan); M.S.E.E., M.S.C.S., Ohio University.

C. KENT CLINGER, *Assistant Professor of Chemistry.* (1985).
B.S., Oklahoma Christian College; B.B.S., Abilene Christian University; Ph.D., University of Texas.

JOHN T. BURNS, *Assistant Professor of Biology.* (1985).
B.A., Wabash College; M.S., Ph.D., Louisiana State University.

ARLENE A. ADAMS, *Assistant Professor of Education.* (1986).
B.S., State University of New York, New Paltz; M.S., Southern Connecticut State College; Ed.D., State University of New York, Albany.

D. RICHARD TEUBNER, *Assistant Professor of Communications.* (1986).
B.S., Southwest Texas State University; M.A., Morehead (Ky.) State University.

JEANNE L. JOHNSTON, *Assistant Professor of Physical Education and Acting Head of the Department.* (1985).
B.A., Bethany College; M.S., Smith College; Ed.D., University of North Carolina—Greensboro; Wayne State University; The Ohio State University.

Instructors

JUDITH A. SODERLUND, *Instructor in Physical Education.* (1985).
B.S., Plymouth State College of the University of New Hampshire; M.S., Ithaca College.

Adjunct Faculty and Lecturers

WILLIAM B. ALLEN *Chaplain of the College.* (1970).

B.A., Bethany College; M.Div., Yale Divinity School, D.Min., School of Theology at Claremont.

RUTH L. WESTLAKE, *Lecturer in Communications.* (1975).

B.A., Kent State University; Ohio University.

DANIEL M. LOWY, *Lecturer in Religious Studies.* (1979).

A.B., New York University; M.H.L., Hebrew Union College (New York); D.D., Hebrew Union College (Cincinnati).

JENNIFER COFFIELD-TOBIN, *Lecturer in Theatre.* (1980).

B.F.A., West Virginia University; M.A., Southern Illinois University.

BETH DAMEIER, *Lecturer in Music.* (1983).

B.A., B.M.F., Wartburg College; M.A., University of Iowa.

TONI P. OLSHAN, *Reference Librarian and Lecturer in Library Science.* (1983).

B.S., M.S., Cornell University.

GARY KAPPEL, *Adjunct Instructor in History.* (1983).

B.A., Bethany College; M.A., West Virginia University.

STEVE T. GRAMMEN, *Lecturer in Accounting.* (1983).

B.A., Washington and Jefferson College; C.P.A.

ROBERT J. FUNK, JR., *Adjunct Instructor in Fine and Applied Arts.* (1984).

A.S., Dean Junior College; B.A., Goddard College; M.F.A., University of Massachusetts.

DEBORAH A. KENNEDY, *Lecturer in Accounting.* (1984).

B.S., Wheeling College; C.P.A.

J. ELAINE BAER, *Lecturer in Communications.* (1985).

A.A., Ventura College; B.A., California State University at Sacramento; M.A., West Virginia University.

PEDRO CUESTA, *Lecturer in Theatre.* (1985).

B.A., Bethany College; M.A., West Virginia University.

LISA A. CAMPANELL, *Lecturer in Physical Education.* (1985).

B.A., West Liberty State College.

WILLIAM M. INGEMI, *Lecturer in Physical Education and Athletic Trainer.* (1986).

B.S., Virginia Commonwealth University; M.S., West Virginia University.

ADVISORS

For Freshmen

Lynn Adkins
William B. Allen
James Allison
Albert R. Buckelew, Jr.
Robyn R. Cole
Larry E. Grimes
David J. Judy
Hiram J. Lester

John W. Lozier
Marc Olshan
J. Trevor Peirce
Howard Seiler
James R. Speegle
T. Gale Thompson
C. Kent Clinger

For Fields of Concentration

Accounting Harold M. Curnutte
Biology Albert R. Buckelew, Jr.
Chemistry Milton R. Smith, Jr.
Communications Harold C. Shaver
Computer Science James E. Allison
Economics and Business . . James R. Speegle
Education Ann C. Shelly
English Larry E. Grimes
Fine and Applied Arts David J. Judy
Foreign Languages Pauline R. Nelson
Health Science Gary E. Larson
History William L. Young
Interdisciplinary
Studies Larry E. Grimes
Mathematics James E. Allison
Philosophy Robert E. Myers
Physical Education Jeanne L. Johnston
Physics Edwin Goldin
Politics and
Public Policy Albert J. Ossman, Jr.
Psychology John H. Hull
Religious Studies Richard B. Kenney
Science Applications Edwin Goldin
Sociology and
Social Work Lynn Adkins

For Career Interests

Advertising James W. Carty, Jr.
Dentistry Gary E. Larson
Drama David J. Judy
Engineering Edwin Goldin
Law Albert J. Ossman, Jr.
Medicine Gary E. Larson
Ministry Richard B. Kenney
Newspaper Joe M. Lesem
Public Relations Harold C. Shaver
Radio Harold C. Shaver
Recreation Leadership . . . John J. McGowan
Social Work Lynn Adkins
Teaching Ann C. Shelly
Television Russell J. Cook
Veterinary Medicine Gary E. Larson

For Professional Core Program

Albert J. Ossman, Jr.

For Special Services

Campus Employment Gwendolyn Allen
Counseling Francesca Giordano
Foreign Students Gary E. Larson
Graduate Fellowships
and Scholarships Robert E. Myers
Ministerial Training
Awards Robert A. Sandercox
Social Security and
Veterans Benefits John C. Giesmann
Social and Recreational
Activities Darline B. Nicholson
Special Advising I. Howard Seiler
Undergraduate
Scholarships Theodore W. Bunnell
Beth Dameier

Writing and

Developmental Studies . . . Robyn R. Cole
Career Counseling James R. Speegle
Francesca Giordano
Gwendolyn Allen

FACULTY COMMITTEES

Student members are appointed annually to many of the following committees by the President of the College and upon the recommendation of the Student Board of Governors.

ADMISSION

James E. Allison, *Convener*; Lynn Adkins, John S. Cunningham, John D. Davis, Richard B. Kenney, Milton R. Smith, Jr., Thomas H. Stein, (*ex officio*).

ATHLETICS

John U. Davis, *Convener*; John C. Giesmann, Joseph M. Lesem, John J. McGowan, Wallace B. Neel, Judith A. Soderlund.

CAMPUS MEDIA

Harold C. Shaver, *Convener*; James W. Carty, Jr., Russell J. Cook, John U. Davis, Walter L. Kornowski, Robert Layton, Joseph M. Lesem, James M. Meyer, John R. Taylor, Ruth L. Westlake.

CAREER ADVISEMENT

John S. Cunningham, *Convener*; Lynn Adkins, Gary E. Larson, Robert E. Myers, Darline B. Nicholson, Albert J. Ossman, James R. Speegle. **Graduate School:** Robert E. Myers, *Convener*; Jonas Barciauskas, Stanley L. Becker, Robyn R. Cole, Marc A. Olshan, Majid Sawtarie. **Health Professions:** Gary E. Larson, *Convener*; Albert R. Buckelew, Jr., John T. Burns, Charles Kent Clinger, J. Trevor Peirce, Milton R. Smith, Jr. **Pre-Law:** Albert J. Ossman, *Convener*; John D. Davis, Jacqueline DeLaat, John W. Lozier, Anthony L. Mitch, William L. Young. **Social Work:** Lynn Adkins, *Convener*; Katherine S. Coram, Marc A. Olshan, Ann C. Shelly, James A. Zalacca.

COMPUTER ADVISORY

Edwin Goldin, *Convener*; James E. Allison, Stanley L. Becker, David T. Brown, Russell J. Cook, Harold M. Curnutte, Joseph M. Kurey, Anthony L. Mitch, Robert A. Paysen, J. Trevor Peirce, Fujiko O. Sawtarie, Majid A. Sawtarie, Justin B.G. Skywatcher, Milton R. Smith, Jr.

CURRICULUM

Larry E. Grimes, *Convener*; James E. Allison, John C. Giesmann, Edwin Goldin, Joseph M. Kurey, Anthony L. Mitch, Robert E. Myers, Albert J. Ossman, Harold C. Shaver, Ann C. Shelly.

EXTERNAL EDUCATION

James R. Speegle, *Convener*; William B. Allen, W. Randolph Cooley, Mary Ellen Komorowski, Joseph M. Kurey, Hiram J. Lester, Anthony L. Mitch, Wallace B. Neel, Darline B. Nicholson, Toni P. Olshan, Robert A. Sandercox, Ruth L. Westlake.

FACULTY BUDGET

David T. Brown, *Physical and Life Sciences* (1989); John R. Taylor, *Humanities* (1988); Harold C. Shaver, *Social Sciences* (1988); David J. Judy, *Representative to the Board of Trustees*; Albert J. Ossman, *At-Large* (1987).

FACULTY DEVELOPMENT

Marc A. Olshan, *Convener*; John T. Burns, W. Randolph Cooley, Russell J. Cook, Harold M. Curnutte, Jacqueline DeLaat, John J. McGowan, Pauline R. Nelson, Fujiko O. Sawtarie, I. Howard Seiler, Judith A. Soderlund, T. Gale Thompson.

FACULTY PERSONNEL

James E. Allison, *Physical and Life Sciences* (1987), *Convener*; Lynn Adkins, *Social Sciences* (1989); John H. Hull, *At-Large* (1988); Anthony L. Mitch, *Humanities* (1989); Harold C. Shaver, *At-Large* (1989).

FACULTY WELFARE

John H. Hull (1987), *Convener*; Jacqueline DeLaat (1989), Marc A. Olshan (1988), Robert A. Paysen (1989), T. Gale Thompson (1988).

GANS AWARD

Milton R. Smith, Jr., *Convener*; Albert R. Buckelew, Jr., Edwin Goldin, John H. Hull, Gary E. Larson, Robert A. Paysen, J. Trevor Peirce.

HONORS

Robert E. Myers, *Convener*; James W. Carty, Jr., John S. Cunningham, Richard B. Kenney, Darline B. Nicholson, Robert A. Sandercox, Ann C. Shelly, John R. Taylor, T. Gale Thompson, William L. Young.

INTERDISCIPLINARY STUDIES

Larry E. Grimes, *Convener*; James E. Allison, Jonas Barciauskas, Stanley L. Becker, Jacqueline DeLaat, Hiram J. Lester, Marc A. Olshan, Robert A. Paysen, T. Gale Thompson.

INTERNATIONAL EDUCATION

Pauline R. Nelson, *Convener*; James W. Carty, Jr., W. Randolph Cooley, Mary Ellen Komorowski, Gary E. Larson, John W. Lozier, Albert J. Ossman, William L. Young.

POLICY APPEALS

John C. Giesmann, *Convener*; Albert R. Buckelew, Jr., John S. Cunningham, John D. Davis, Richard B. Kenney, Joseph M. Kurey, John J. McGowan, Darline B. Nicholson, I. Howard Seiler.

PRACTICUM REVIEW

T. Gale Thompson, *Convener*; Albert R. Buckelew, Jr., Charles Kent Clinger, Katherine S. Coram, John H. Hull, Joseph M. Lesem, Pauline R. Nelson, Harold C. Shaver.

RELIGIOUS LIFE

John H. Hull, *Convener*; William B. Allen, Jonas Barciauskas, James W. Carty, Jr., John C. Giesmann, Richard B. Kenney, Mary Ellen Komorowski, Robert E. Myers, Wallace B. Neel, John R. Taylor.

STUDENT LIFE

John S. Cunningham, *Convener*; Robyn R. Cole, Katherine S. Coram, Harold M. Curnutte, Walter L. Kornowski, John W. Lozier, James M. Meyer, Wallace B. Neel, I. Howard Seiler, James A. Zalacca; (*ex officio*): Theodore W. Bunnell, John C. Giesmann, Toni P. Olshan, Darline B. Nicholson, Christine Ossman, Joanne Sykes.

TEACHER EDUCATION

Ann C. Shelly, *Convener*; Lynn Adkins, David T. Brown, Albert R. Buckelew, Jr., John U. Davis, Jacqueline DeLaat, David J. Judy, Mary Ellen Komorowski, Pauline R. Nelson, I. Howard Seiler.

COLLEGE COUNCIL AND FACULTY SENATE

The College Council advises the President of the College on matters of student relations and the impact of policies and practices on student life. Its membership is comprised of senior administration and faculty who are designated by the President, and of presidents of fraternities, sororities and house associations. The Executive Dean for Student Affairs chairs the Council.

The Faculty Senate discuss issues regarding the educational programs of the College and advises the President of academic concerns. Membership includes all department heads, full professors, executive officers, and three elected faculty members. Elected members for 1986-1987 are *John T. Burns*, *Charles Kent Clinger* and *Joe M. Lesem*. The Dean of the Faculty chairs the Senate.

Index

A

Academic Advisor	23
Academic Common Market	24
Academic Computer Center	27
Academic Procedures	39
Academic Programs	19
Accounting Courses	45
Accreditation	7
Achievement Recognition	33
Adjunct Faculty	117
Administration	113
Admission	11
Advanced Placement	12
Advisors	117
Aid	15
Alumni Council Membership	112
Alumni Field House	27
Application	11, 12
Application Fee	13
Art Courses	72
Assets of the College	26
Assistant Professors	116
Associate Professors	115
Astronomy	46
Athletics	31
Attendance Policy	40
Awards	35

B

Benedum Commons	27
Bethany House	27
Bethany Profile	5
Biology Courses	47
Board, Cost of	15
Board of Trustees	111
Breakage Deposit	16
Business and Economics Courses	56

C

Calendar	2
Campus Map	8, 9
Career and Professional Development	24
Career Interest Advisors	117
Center for Academic Computing	27
Change of Schedule	40
Change in Regulations	41
Chemistry Courses	49
Chief Business Officer	113
Christian Church (Disciples of Christ)	5
Classification of Students	40
Class Attendance Policy	40
Cochran Hall	26
College Life	29
College Council	118
Commencement Hall	26
Committees, Board of Trustees	112
Committees, Faculty	118
Communications Courses	51
Communications Design Courses	53
Community College Graduates	11
Comprehensive Charges	15
Comprehensive Examinations	22
Computer Science Courses	54
Course Descriptions	43
Course Load	39
Course Offerings	39
Course Index	42
Cramblet Hall	26
Cross-Listed Courses	39

D

Dean of Faculty	113
Dean of Student Affairs	113
Dean of Student Life	113
Dean's List	33
Degrees	20
Design Courses	73
Directories	111

E

Early Admission	12
Economics and Business Courses	56
Educational Resources	26
Education Courses, Programs	59
Emeriti Faculty	114
Endowment Funds	26
English Courses	67
Expenses	15
External Programs	25

F

Faculty	114
Faculty Committees	118
Faculty Senate	118
Fees, Special	16
Field of Concentration	20
Field of Concentration Advisors	117
Financial Aid	15
Fine and Applied Arts Courses	72
Fine and Applied Arts Fees	16
Foreign Language Courses	75, 78
Foreign Students	13
Founding of the College	5
Fraternal Life	29
French Courses	75
Freshman Advisors	117
Freshman Interdisciplinary Lecture	23, 43
Freshman Program	23
Freshman Seminars	23, 44
Freshman Studies Courses	44

G

General Sciences	79
Geography	79
German Courses	76
Goals of the College	6
Grace Phillips Johnson Visual Arts Center	26
Grading System	39
Graduation Honors	33
Graphics, Communication Design Courses	73, 79
Greek Courses	78
Gresham House	27

H

Harder Hall	27
Health Science	80
Heuristics	80
History Courses	81
Honorary Trustees	112
Honor Societies	34

I

Independent Study	39
Instructors	117
Intercollegiate Athletics	31
Interdisciplinary Studies Courses	84
Intramurals	31
Invalidation of Credits	41

J

January Term	2
--------------------	---

L

Leadership Center	27
Lecturers	117
Leisure Studies	91
Library	27, 85
Literary Studies	76, 78

M

Madrid Study Program	25
Map of the Campus	8, 9
Mathematics Courses	86
Matriculation Fee	13
Media Center	27
Media, Student	30
Memberships, College	7
Millsop Center	27
Music Courses	73

N

Natatorium	27
------------------	----

O

Oglebay Hall	26
Old Main	26
Overseas Program Fees	16
Overseas Study Offerings	25
Oxford Study Program	25

P

Paris Sorbonne Program	25
Payment of Student Accounts	17
Payment Plans	17
Pendleton Heights	27
Perspectives Program	21
Phillips Hall	29
Phillips Library	27
Philosophy Courses	88
Physical Education Courses	90
Physics Courses	95
Policy Appeals Board	41
Politics and Public Policy Courses	98
Practicum Program	23
Pre-Professional Study Programs	19
President	113
Probation	40
Professional Core Advisors	117
Professional Core Program	19, 43
Professional Education	60
Professors	114
Provost for College Advancement	113
Psychology Courses	100
Publications, Student	30

R

Readmission	13
Recognition Awards	33
Recreation	31
Refunds	17
Registration Deposit	13
Regulation Changes	41
Religious Life	30
Religious Studies Courses	103
Renner Union	27
Requirements for Degree	20
Residence Life	29
Residence Requirement	23
Richardson Hall of Science	26
Room, Cost of	15

S

Scholarships	33
Science Applications	106
Senior Comprehensive Examinations	22
Senior Fellowships	33
Senior Project	22
Social Life	29
Social Sciences	106
Social Work Courses	109
Sociology Courses	108
Spanish Courses	77
Special Education	66
Special Examinations	40
Special Fees	16
Special Services Advisors	117
State Government Study	24
Steinman Fine Arts Center	26
Student Board of Governors	29
Student Drawing Account	17
Student Government	29
Student Health Services	31
Student Life	29
Student Regulations	30

T

Theatre Courses	74
Three-Dimensional Art	73
Transcript of Records	41
Transfers	11
Treasurer	113
Tubingen Study Program	25
Tuition	15
Two-Dimensional Art	73

V

Visiting Bethany	12
------------------------	----

W

Washington Semester	24
Withdrawals	17, 41
Work Internships	24
Writing Proficiency Requirement	23

Notice of Nondiscrimination Policy

Bethany College admits students of any race, color, sex, religion, handicaps, and national or ethnic origin to all of the rights, privileges, programs and activities generally accorded or made available to students at the school. Bethany does not discriminate on the basis of race, color, sex, religion, and national or ethnic origin in the administration of its educational policies, scholarship and loan programs, athletic activities or other school-administered programs.



